Agency in Ancient Writing

Joshua Englehardt

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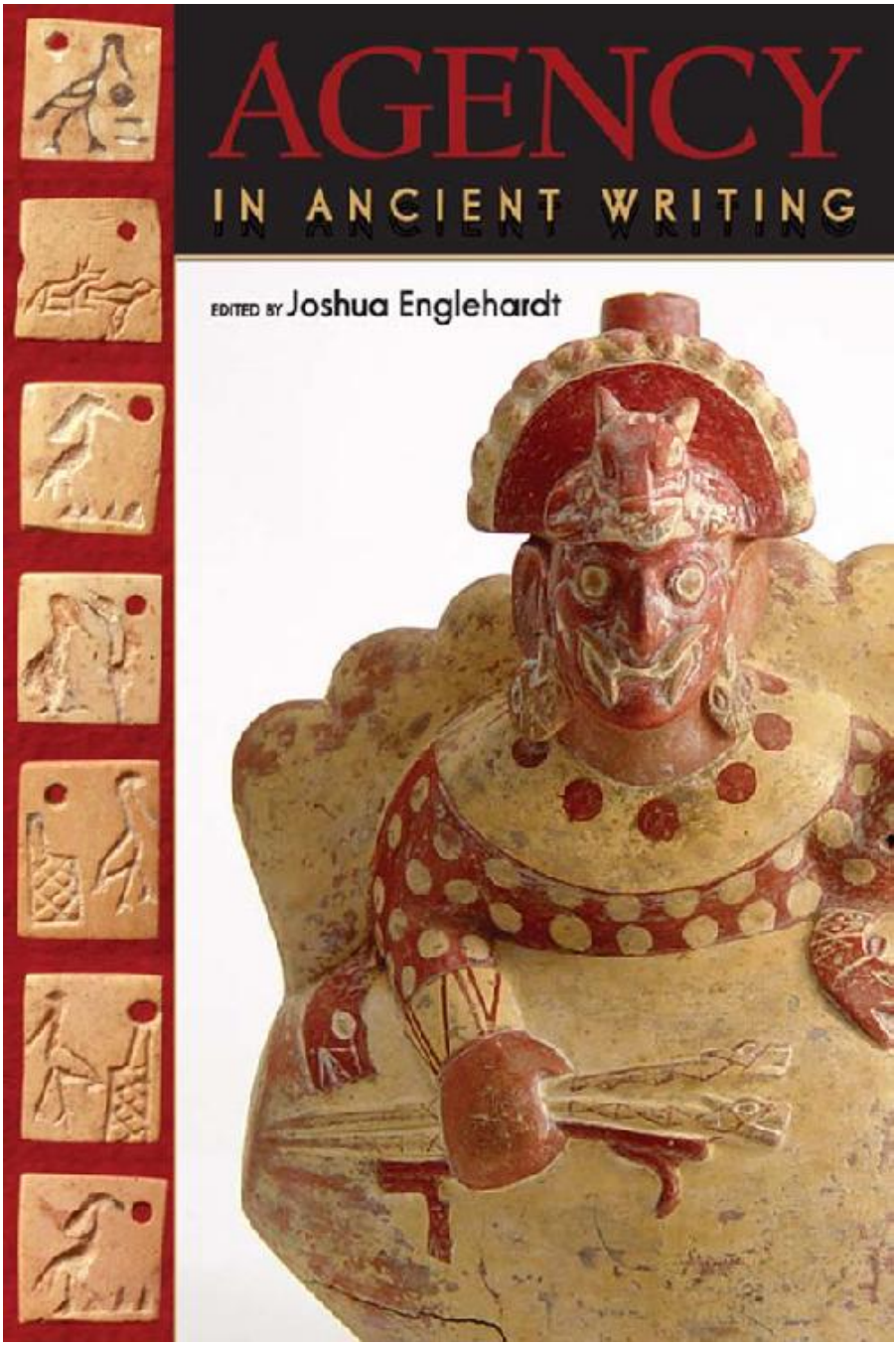
AGENCY IN ANCIENT WRITING

EDITED BY Joshua Englehardt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Contents

List of Figures

List of Tables

Foreword

—*Jennifer* L. *Dornan*

Acknowledgments

Introduction: Individual Intentionality, Social Structure, and Material Agency in Early Writing and Emerging Script Technologies

—*Joshua Englehardt and Dimitri Nakassis*

Part I: Agency in the Formation of Early Writing and Notational Systems

1. The Mediated Image: Reflections on Semasiographic Notation in the Ancient Americas

—*Margaret A. Jackson*

2. Bureaucratic Backlashes: Bureaucrats as Agents of Socioeconomic Change in Proto-Historic Mesopotamia

—*Clemens Reichel*

3. Are Writing Systems Intelligently Designed?

—*Adam D. Smith*

4. Agency in Death: Early Egyptian Writing from Mortuary Contexts

—*Laurel Bestock*

Part II: The Material Agency of Early Writing and Incipient Scripts

5. Reembodying Identity: Seals and Seal Impressions as Agents of

Social Change on Late Prepalatial Crete

—*Emily S.K. Anderson*

6. Performance, Presence, and Genre in Maya Hieroglyphs

—*Michael D. Carrasco*

7. Contingency and Innovation in Native Transcriptions of Encrypted Cuneiform (UD.GAL .NUN)

—*J. Cale Johnson and Adam Johnson*

Part III: Agency through Writing and Early Texts

8. Structuration of the Conjuncture: Agency in Classic Maya Iconography and Texts

—*Joshua Englehardt*

9. Inscriptions from Zhongshan: Chinese Texts and the Archaeology of Agency

—*Wang Haicheng*

10. Structuration and the State in Mycenaean Greece

—*Dimitri Nakassis*

Epilogue: Agency and Writing

—*Ruth D. Whitehouse*

References

List of Contributors

Index

Figures

1.1. Word-image dichotomy

1.2. Writing-pictures-notation tripartite model

1.3. Train schedule illustrating spatial correspondence of time and distance in graphic format

1.4. Aztec *in extenso* almanac page with day signs, deities, and mantic signs, Codex Borgia

1.5. Almanac page with cosmographic diagram, Codex Fejérváry-Mayer

1.6. Inca khipu

1.7. Mixtec res gestae manuscript page, Codex Selden

1.8. Road sign in context

1.9. Mural cycles, north frontis, Huaca de La Luna, Moche Valley, Peru

1.10. Feline gold spangle headdress, Huaca de La Luna

1.11. Moche stirrup-spout bottle shaped as conch-shell trumpet with deity emerging

1.12. Moche stirrup-spout bottle, “Revolt of Objects” theme

2.1. Map of the Near East, showing sites discussed in text

2.2. Stamp seals (and modern impressions), black stone, showing dancers, from Hamoukar, Late Chalcolithic 2 (4500–4000 BC)

2.3. Clay sealings: a jar sealing (from Hamoukar, ca. 3500 BC) and a door sealing (from Tell Asmar, Iraq, ca. 1900 BC)

2.4. Late Uruk cylinder seals: seal with a temple and two goats feeding off a plant (from Khafaje, Iraq, ca. 3100 BC); seal with squatting women(?) manufacturing pottery vessels and one with a series of spiders, possibly symbolizing textile work (from Tell Agrab, Iraq, ca. 3000 BC)

2.5. Administrative complexes at Hamoukar

2.6. Close-ups of tripartite building TpB-A, showing spatial distributions of clay sealings

2.7. Selection of tokens from Choga Mish and Hamoukar

2.8. Sealed clay ball with tokens inside and broken clay ball showing tokens inside

2.9. Circular tablet with five impressions, showing simple numerical notation

2.10. Numerical tablet marked with 5(+?) wedge-shaped markers, sealed with cylinder-seal impression showing women making pottery jars (from Choga Mish, ca. 3100 BC)

3.1. Engraved bronze plaque from tomb 13 at Shizhaishan, Yunnan

3.2. Replicating sign forms among engraved bronze items from the Shizhaishan cemetery

3.3. Two verbatim copies of the same divination text, showing variable script direction and concomitant boustrophedon mirror flips

4.1. Map of Egypt showing the location of sites associated with early examples of writing

4.2. Plan of the subterranean chambered tomb U-j at Abydos, ca. 3300 BCE

4.3. Examples of the ivory and bone tags found in the southern chamber of tomb U-j

4.4. Examples of the ivory and bone tags found in the southern chamber of tomb U-j

4.5. Ceramic jars with scorpion inscriptions from tomb U-j

4.6. Photograph and drawing showing the repeated serekh of King Aha of the early First Dynasty

4.7. Two private stelae from subsidiary graves adjacent to the First Dynasty royal tombs at Abydos

5.1. Example of a typical EM I—II soft stone seal

5.2. Impressions on an EM II sealing from Myrtos

5.3. Sites where Parading Lions glyptic material has been found

5.4. Examples of the EM III–MM IA Parading Lions group

5.5. A sample of motifs belonging to the EM III–MM IA Parading Lions group

5.6. An EM III–MM IA sealing from Khamaleuri carrying four

impressions rendered by a Parading Lions seal

5.7. An EM III jar stopper from Knossos impressed with a Parading Lions seal

6.1. Codex-style vessel depicting two scenes of an old god lecturing to pupils (K1196)

6.2. Classic period cylindrical vessel depicting deities making offerings to a codex (K8075)

6.3. Classic period cylindrical vessel depicting nighttime sacrificial scene (K1377)

6.4. Classic period cylindrical vessel depicting mythological scene with scribal deities seated atop a personified mountain cave (K501)

6.5. Classic period vessel depicting water bird with pseudo-glyphs (K5973)

6.6. Classic period vessel depicting water birds with legible Primary Standard Sequence (K5360)

6.7. Inscription from an unprovenanced limestone panel

6.8. Polychrome cylinder vase from Burial 196, Tikal, Guatemala, depicting a dialogue between a hummingbird figure and Itzamnaaj (K8008)

6.9. Regal Rabbit Vase (K1398)

6.10. Regal Rabbit Vase (detail)

6.11. Tablet of the Orator

6.12. Tablet of the Scribe

6.13. Panel of the 96 Glyphs (detail), Palenque, Mexico

7.1. UD.GAL.NUN as the encoded UD.GAL.NUN version of ^{d}EN.LIL$_2$

7.2. Three cases broken up into six half-cases

7.3. First nine occurrences of the divine name Enki (written UD.GAL. UNUG/KI) in SF 37

7.4. Source, transcription, and gloss to SF 37 ii 20

7.5. Source, transcription, and gloss to SF 37 ii 21a

8.1. Tikal Stela 31, text on rear face

8.2. Tikal Stela 31, front and side faces

8.3. Map of Mesoamerica detailing sites discussed in text

8.4. Scene from a mural at Uaxactún, showing a Maya lord in a gesture of greeting or submission to an armed warrior in Teotihuacán-style attire

8.5. Tikal Stela 32, showing a highland warrior wearing a so-called tassel headdress in direct Teotihuacán art style

8.6. Tikal Stela 4, depicting the accession of Yax Nuun Ayiin to the throne of Tikal, wearing a Teotihuacán-style shell necklace and elaborate headdress, and holding a possible "conquest torch bundle" in his left hand

8.7. Tikal Stela 18, depicting Yax Nuun Ayiin, now wearing a mixture of Teotihuacán and traditional Maya objects

8.8. Uaxactún Stela 5, showing Yak Nuun Ayiin in Teotihuacán-style headdress and holding an atlatl and obsidian-spiked club at his accession and celebrating the same arrival event as Tikal Stela 31

8.9. Portrait of Copán dynastic founder K'inich Yax K'uk' Mo' on west side of Copán Altar Q

9.1. Major states of the Warring States period

9.2. Plan of the ancient city of Lingshou

9.3. Square hu vessel from King Cuo's tomb, dated 314 BCE

9.4a. Bronze tridents and ding tripods from King Cuo's tomb

9.4b. One suggested reconstruction of the tridents for decorating a tent

9.5. A clay figurine interpreted as worshiping a group of clay mountains, from the foundry site at Lingshou

9.6. Measuring cups from Lingshou

9.7. Iron farming tools from Lingshou

9.8a. A possible private foundry at Lingshou for illicit casting of bronze coinage

9.8b. Stone molds for casting coins

10.1. Pylos tablet Jn 750

10.2. Elevation map of the Pylian polity, with the approximate locations of the activities of Awekseus and Plouteus

Tables

3.1. Visual objects (actions) or visual words? (Chinese script ca. 1250 BCE)

3.2. Shizhaishan plaque

3.3. Verbs of motion written with the component FOOT 𐬀.

3.4. Declining pictography in HEAD

7.1. Evident sequences of UD.GAL.UNUG in SF 37

9.1. Political actors in the states of Zhongshan and Yan

10.1. The distribution of personal names ranked by the number of tablet series on which they appear, using only certain and complete names

Foreword

Since their inception, the social sciences have struggled to understand the complex interplay between self and society. In recent years, we have increasingly accepted that there is never a simple mapping of cultural meaning and social categories onto the minds of those individuals participating in, reproducing, and altering a culture. As such, focus has rightfully shifted to exploring the (often purposeful) differential selection and interpretation of shared cultural propositions by individuals as we acknowledge the actual processes of meaning making and internalization in our investigations into the workings of culture, symbol, and power.

Agency theory has provided us with a framework within which we can begin to resolve some of the tension between entirely individualistic and collectivistic approaches by embracing social models that incorporate a more sophisticated understanding of a phenomenologically embodied, culturally embedded social subject. In turning to a traditional phenomenological interest in conscious experience, we have accepted that it is not enough to acknowledge that the individual is an ontological necessity in our interpretive frameworks. Likewise, we have also begun to explore the processes and mechanisms through which cultural schemata are internalized and are able (or unable) to have motivational force at the individual level. Certainly, although there are historically and locally specific "cultural scripts" that people may utilize to interpret their experiences and enact their desires, these schemata are not simply proscribed, pregiven, and static entities that are unthinkingly internalized and authenticated. Rather, they are the raw materials that individuals incorporate, alter, internalize, and authenticate in ongoing integrative negotiations over the course of their lives.

As attention has shifted toward investigating ways to incorporate the agentive individual into social theory and practice, related theoretical concepts such as identity, selfhood, subjectivity, intentionality, and experience reflect the complexity of this task. For instance, does a focus on experience and the embodied individual inherently neglect issues of power and social structure? Must we rely on universal categories of perception and interpretation when exploring the subjectivity of individuals? In turning to an agency approach, are we relegated to "empathy" as a methodology? Indeed, the relatively new field of embodied cognition demonstrates that the movements and emotions of others can often echo within us as if they are our own (De Waal 2009), indicating that what in fact constitutes

the individual is no simple matter.

Within archaeology, many scholars have recently begun to explore avenues through which it may be possible to construct more inclusive interpretations of past cultural systems and the agents acting within them based on notions of experience, cognition, emotion, identity, embodiment, and subjectivity. Because individual intentionality is constructed and understood through interaction, archaeological approaches to agency have focused on the difficult task of understanding this process of discursive structuration. At the same time, the difficulties in implementing a theoretically and methodologically sophisticated agency approach to the past have also become apparent, causing archaeologists to reconceptualize the ways in which we interpret our data.

Although there is clearly an inherent link between cultural structures, individual intentionality, and material culture, it is simplistic to imagine that different types of data always provide the same access to agency of the past. Some acts of human expressivity are clearly more or less affordant for accessing motive and meaning. Methodologically, it is often assumed that there is an inherent gulf between the concrete, representational artifacts and documents available to us for interpretation and the more esoteric thoughts, motives, and experiences that they encompass and reflect. Yet, philosopher Thomas Csordas argues it should not be assumed that "there is an absolute methodological gulf between representation and being-in-the-world" because understanding intentionality "is a function of interpreting action in different modes and expression in different idioms" (Csordas 1993, 148). In other words, to incorporate and attempt to understand the situated subjectivities of the past does not require that we develop some "technique to measure mysterious essential existential emanations" through purely empathetic means, but instead that by engaging with data through a variety of modes, scholars may be able to understand historically and culturally elaborated ways of attending to and with embodied subjectivities (Csordas 1993, 148).

Although epigraphic data do not provide a clear window onto the discursive structuration of the past, this volume reflects the exact type of varied engagement with early writing that Csordas suggests.

All writing, from monumental displays of elite propaganda to privately scrawled graffiti, reflects the drive to communicate. Ancient texts are the ultimate artifact of culturally bound intentionality as expressed through practice. Linguistic anthropologists understand that language both frames thought and reflects culturally bound perspectives, and no other class of material artifact is so clearly about

the expression of culturally situated meanings. On its own, the information provided by the written medium (location, audience, resources, etc.) combined with the actual textual content is a wealth of data addressing historically situated actors. But by contextualizing these epigraphic expressions within a matrix of larger social practice, ancient writing provides a truly unique lens through which to view the intersection of social structure, individual intentionality, and practice.

In light of this inherent complexity and the wonderfully varied approaches represented within, this volume is truly a welcome addition to the growing body of research seeking an agency approach to the past.

JENNIFER L. DORNAN

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Thanks also go to the SAA for hosting the initial symposium, and I extend thanks to all of those individuals who attended the session (in spite of the hour!) for their participation in a lively and stimulating discussion following the conclusion of the symposium. Like the voices of Justeson and Robb, although they may not be explicitly credited in the chapters of this book, their opinions and perspectives have nonetheless found their way into our work. I extend additional thanks to the many invitees to the session who were unable to participate or attend but provided valuable advice and suggestions for potential contributors. In particular, I thank Stephen Houston, Bob Englund, Jerry Cooper, Marcia-Anne Dobres, Denise Schmandt-Besserat, and John Baines.

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AGENCY IN ANCIENT WRITING

INTRODUCTION

Individual Intentionality, Social Structure, and Material Agency in Early Writing and Emerging Script Technologies

Joshua Englehardt and Dimitri Nakassis

A search for "agency" and "archaeology" in virtually any academic database will yield a vast number of books, articles, and reviews, written for the most part in the past twenty years. If, however, one adds the search term "text" or "writing," the number of hits diminishes dramatically, and if references to modern texts and writing are removed, the result is virtually nil. Such searches measure very crudely what we archaeologists already know: agency and text have not to date been archaeological concerns (cf. Yoffee 2005, 113—30). Why should this be? After all, reading and interpreting ancient texts are an important aspect of doing archaeology in many chronological periods in both the New and Old Worlds. Indeed, it could be argued that ancient writing should have *increased* in prominence with the popularity of agency approaches in archaeology; after all, individual agents are frequently evident in early writing systems in a way that they are not in the archaeological record. Early texts are full of people with names doing specific things in particular places and times. These textually attested actors seem to have agency, if we use the generally accepted definition of agency as the capacity to make a difference through action (Giddens 1984, 14). This is precisely the problem, however—identifying individuals and their actions alone does not constitute the study of agency. The view that social life is the aggregation of the intentional and rational decisions of historical actors is one that agency approaches of nearly every stripe seek to abolish and overcome.

As the chapters in this volume amply demonstrate, however, the study of agency in early writing is much more than cataloging

political and military events from annalistic accounts and describing the transformative power of early rulers. They show that the analysis of early writing can make an important contribution to agency in archaeology. Not only do ancient texts and other communicative technologies provide evidence that allows us to access multiple aspects of agency in antiquity, but the objects and the communication systems that they reflect can be analyzed in terms of agency approaches. That is, texts can tell us both the *what* and the *how* of agency (cf. Malafouris 2011). They cannot do so alone, however, and this is an important thread shared by the chapters in this book. Ancient texts, like certain types of archaeological finds (Hodder 2000, 26), may occasionally include detailed and vivid information about particular historical events and actors, but without understanding the wider social, historical, and material context of the text and what it describes, it is difficult to advance beyond description and guesswork. The study of ancient writing and texts through the theoretical lens of agency approaches forces the analyst to attend to the complex of relationships among historical actors (both those described in the text and those who produced it), social structures, and material culture to produce detailed and compelling analyses.

Writing is therefore far from a "magic bullet" that can solve the theoretical, methodological, or evidentiary problems associated with agency approaches to ancient societies. It is (or should be), however, an important part of agency in archaeology. In this chapter, we will explain and justify this bald assertion through discussions of what it means to study agency in archaeology and why texts are particularly useful for this task, and finally how and why agency approaches can meaningfully contribute to epigraphical interpretation and the synthesis of epigraphic and archaeological data.

AGENCIES IN ARCHAEOLOGY

In the past few decades, the notion of agency has increasingly entered the lexicon of anthropological archaeology. Over this time it has become absorbed and integrated into the mainstream of archaeological discourse, and it seems here to stay (Robb 2010). Almost from the beginning of agency's use in archaeological literature, there have been as many ideas about what constitutes agency as authors who have treated the topic (Dobres and Robb 2000, 9; Dornan 2002; Robb 2001). Disparate applications of "agency" have been employed in analyses of the material record to address issues ranging from individual intentionality (Hodder 2000), personhood and identity (Gardner 2007; Gillespie 2001; Meskell 2001), historical

motivations and political strategies of social actors, artistic and material style and technological production (Dietler and Herbich 1998; Dobres 2000; Gell 1998; see also the papers in Hill and Gunn 1977), sociopolitical evolution (Blanton et al. 1996), practical rationality, political resistance, and the (sometimes) unintended consequences of social struggle or cultural contact (Barrett 2000, 62, 65; Pauketat 2000, 2001; Silliman 2001) to the interplay among structure, event, individual practice, and historical process (Gardner 2007; Robb 2007, 2010). A number of post-processual authors have used agency in an attempt to counter neo-evolutionary and structural-functionalist deterministic models of human action (e.g., Kristiansen 2004; Meskell 1999; Shanks and Tilley 1987; see also Ashmore, Wooffitt, and Harding 1994; Johnson 1989).

Agency has thus variously been equated with individual social actors and their unique cognitive structures, free-willed resistance to social norms or power inequalities, and the capacity for adept social practice free of sociocultural and structural constraints, rooted in rational intentional action, conscious practice, unconscious dispositions, or subjective experience (Dornan 2002, 304, Knapp and van Dommelen 2008; cf. Barrett 2000; Moore 2000; Thomas 2004). Although some see a strong connection between agents and individuals identifiable in the archaeological record (Knapp and van Dommelen 2008; see also the contributions to this volume by Englehardt, Nakassis, and Wang Haicheng), others warn of conflating agency and actors (e.g., Barrett 2000, 2001; Moore 2000, 260).

In light of the diversity of the notional terrain of the term “agency” and its variable manifestations, and because of the breadth of its theoretical and practical applications, it has become increasingly difficult to adequately define the construct, evaluate its methodological and analytic strengths and weaknesses, or address the question of who, or what, has agency (Ashmore, Wooffitt, and Harding 1994, 734; Dobres and Robb 2005; Silliman 2001, 191-92). Ortner (1984, 127; 2001; 2006) suggests that the concept of agentive practice is neither a theory nor a method in itself but rather the symbol of an emerging theoretical orientation under whose aegis a variety of theories and methods have flourished. Likewise, Dobres and Robb (2000, 2005) argue that there has been little archaeological consideration of the fundamental epistemological and methodological issues associated with the agency concept and its variable uses (see also Kristiansen 2004; Thomas 2000, 2004). Dobres and Robb count well over twenty distinct definitions of the agency concept in a review of the then-recent literature on the topic. In such a situation, they argue, the term has become “an ambiguous platitude meaning everything and nothing” (Dobres and Robb 2000, 3). Moore’s

conclusion to the Dobres and Robb volume offers a similar assessment, suggesting that terms such as "agency" are used as a kind of "disciplinary shorthand" that indicates areas of human life, capacity, and relations to which investigators refer in their analyses (Moore 2000, 262). Kristiansen (2004, 84) takes this criticism a step further, asserting that employing the agency concept signals little more than theoretical affiliation, and that a certain "conceptual sloganism" dominates recent discussion of the topic.

Despite such confusion, agency continues to attract archaeologists precisely because it allows investigators, albeit in a variety of ways, to overcome two divisions fundamental to social inquiry: one between agents and structures and another between human subjects and material objects. Agency is an open concept that can be employed in different theoretical contexts for different interpretive goals, and therein lie both its danger and its attraction. Yet within the disparate and sometimes contradictory definitions and utilizations of agency, several central issues and common themes emerge (cf. Robb 2010).

Archaeological applications of agency often owe much to the practice theory of Pierre Bourdieu (1977, 1990a) and Anthony Giddens's structuration (1979, 1984). Such approaches share the fundamental assumption that humans are not uniform automatons and their behavior cannot be described adequately by simple rules of conduct. Instead, social structure and individual action come together in daily practice and constitute a duality in which each presupposes the other. Social agents can at times be goal-oriented individuals who act purposefully, rationally, and strategically to advance their own interests (Dornan 2002, 304; Silliman 2001, 191–92; cf. Barrett 2000; Hodder 2000), but all social action occurs in sociohistorical circumstances not entirely of an agent's own creation (Johnson 1989; Pauketat 2000; Silliman 2001). As Robb (2007, 21) has evocatively put it, "we wind up like Gulliver, tied down by the Lilliputians by a hundred thin threads," most of which we do not see. Because all action is conditioned and made possible by social structures, most actions are not consciously decided upon: internalized structures eliminate the unthinkable, allowing agents to pick courses of action instinctively in most situations (Bourdieu 1990a, 53–54; Giddens 1979, 57). As Giddens (1984, 5–6) points out, agents nevertheless maintain a theoretical understanding of their own behavior and that of others and can provide explanations when asked. In most situations, however, there is no need to pose questions and this practical consciousness remains largely non-discursive. Individual action is thus contextualized within structures that are at once created through agentive practice and themselves provide identity and meaning to the practices of social actors (Knapp and van Dommelen

2008, 23; Meskell 1999, 31; Silliman 2001, 192). In the complex triangle of relationships among individual intentions and motivations, structural constraints, and the unintended outcomes of their actions, humans direct their activities consciously, unconsciously, and practically (Comaroff and Comaroff 1992, 10-37; Dobres and Robb 2000, 10; Knapp and van Dommelen 2008, 21; Ortner 2001; Silliman 2001, 192; cf. Gardner 2004, 3—6; Thomas 2004, 121).

"Material agency," an approach that is largely inspired by actor-network theory (ANT) (reviewed by Latour 2005) and Alfred Gell's *Art and Agency* (1998), has become an important development in the archaeological literature (Knappett and Malafouris 2008). Whereas most theorists consider only humans to be agents because humans alone have the capacity to "act otherwise" (Giddens 1984, 14), material agency defines agency as the capacity to make a difference. It is therefore a property of humans and things alike. Thus, as Giddens and Bourdieu attack the dualism of agent and structure, material agency attacks the dualism of active human subject and passive material object. The advantage of this approach for archaeologists is obvious: it transforms material culture from a passive record of the "real" object of social inquiry (agents and their interactions) to an active participant in, and an important influence on, the social.

Recent debate surrounding the concept of agency in archaeology thus focuses on a number of issues: fixing the unit of analysis on structure or the individual, the role of individuals in structural transformation, the material signifiers that reflect the social affiliations and cultural institutions behind agentive practice, intentions versus consequences of human action, the consciousness and rationality of individual action, the connections between agency and power, the need to historically contextualize agency to establish meaning and direction in archaeological interpretation, and the adscription of action, goals, and power to nonhuman or material agents (Barrett 2001; Dornan 2002, 314—20; Gardner 2004; Knapp and van Dommelen 2008; Knappett 2008; Kristiansen 2004; Olsen 2003; Pauketat 2001; Thomas 2004; van der Leeuw 2008; Walker and Lucero 2000; Yarrow 2008). This volume does not pretend to offer definitive answers to the fundamental questions surrounding agency and its use in anthropological archaeology. Nor does it profess the preeminence or utility of any one particular conception of agency. The chapters in this volume do not take a unified approach to agency theories; they do not share the same theoretical influences and are not equally explicit about their theoretical framework. They do agree, however, that a dialectical relationship between society and individual, and between subject and object, is crucial for achieving a fuller understanding of the complexities of social life. In this sense,

this volume responds to Robb's (2010, 515) exhortation to practice an archaeology *with* agency rather than an archaeology *of* agency.

INSCRIBING AGENCY

Agency approaches share an emphasis on daily practice. The quotidian nature of much of the archaeological record makes it compatible with the emphasis on routine practice among agency theorists, as Robb's (2007) recent study amply shows. Even in the most urban and literate of ancient societies, however, the ability to read and write was rare (see, e.g., Harris 1989). Why early writing and agency, then? In this section, we argue that despite their frequent association with elites, writing and texts provide important insights into the constitution of social practice in ancient societies. We also suggest that because writing belongs to both the material and documentary record, it allows investigators to address the concept(s) of agency from multiple and overlapping perspectives.

First, the textual record of epigraphy offers a unique line of evidence that complements the data available through the archaeological record—texts and archaeology often provide vastly different views of the same time period or historical incident (Kristiansen 2004, 85; see also Chase, Chase, and Cobos 2008, 12, 15). Particular social actors are not always clearly visible in the material record. Texts, on the other hand, are often more able to provide a window into those dimensions of past agents that may not be identifiable archaeologically. A good example is the wealth of information about political leaders provided by the decipherment of the Mayan script (e.g., Martin and Grube 2000). Although it is often the case, as with the Maya, that surviving inscriptions are monumental products of royal history or propaganda and the individuals revealed in them are, consequently, elites and their inner circle, administrative documents such as cuneiform texts from Mesopotamia can also shed light on a wider range of people who may constitute a significant cross section of the population at large. Texts may therefore elucidate historical actors and their activities, allowing for an analysis of their motives and meanings.

As discussed above, motives and meanings of human action are hardly sufficient to produce a cogent discussion of agency, although neither are they irrelevant to this project. Fortunately, epigraphy also provides information about social structures that produce and are produced by the activities of agents. If we follow Sewell (1992) in asserting that social structures are composed of a duality of virtual schemas and actual resources, each of which produces and is produced

by the other, then the inherently material nature of social structure (the resources) means that theoretically they are observable archaeologically. In practice, however, it is often the case that structures are more easily studied textually. Language is an obvious example, but the study of structures that are particularly resource-heavy, such as political institutions, is also dependent on documentary evidence. Textual studies are therefore crucial to the study of both sides of the agency/structure duality. Public inscriptions and administrative documents alike shed light on the identity, actions, and intentions of individual historical actors. At the same time, these documents provide evidence for the schemas of "hard" institutional structures that at once enable and constrain these same actors.

Connected to the issue of identifying agents in the textual record is the debate about the concept of the individual and to what extent it is a projection of modern Western notions, an issue discussed recently by Knapp and van Dommelen (2008). Texts constitute an invaluable source of evidence regarding ancient emic categories of personhood. For example, Lynn Meskell's detailed exploration of Egyptian notions of selfhood and identity, which constitutes an important challenge to the projection of Western individualism into the past, is grounded in large part in the documentary evidence (Meskell 1999, 2002; Meskell and Joyce 2003). This evidence needs to be treated carefully, of course, because texts are never simple expressions of what constitutes personhood. Indeed, the texts that bear on these issues are usually complex in literary, religious, and ideological terms, and even basic readings and interpretations may be debated. Consequently, the textual material needs to be analyzed in its own right alongside the archaeological record; it virtually never can be considered a straightforward testimony or passive background against which the material remains can be compared. As Meskell's studies show, however, the potential gains of using textual and material data in combination to study past notions of the self are great. In our view, studies that incorporate analyses of textual material are, and should be, leading the way in the study of how personhood is constructed in particular historical contexts.

Texts themselves are also material artifacts (Basso 1989; Houston 2004a; Robertson 2004), and as such they are conducive to a practice-based analysis of their production. Epigraphers and palaeographers have for years paid close attention to the processes of writing. Not only can individual writers be identified—sometimes they name themselves, sometimes writing habits can allow scribal hands to be distinguished from each other—but the process of the inscribing can be traced and explicated in exacting detail. Archaeologists can describe production practices as they unfolded in space and time with

inscriptions perhaps more than in any other field of archaeological investigation. For instance, the detailed study of clay tablets from Late Bronze Age ("Mycenaean") Greece allows us now to identify the tablets formed by particular individuals (based on preserved palm prints) and written by a given scribe (based on handwriting) to determine the choices, conscious and unconscious, that the scribe made in formatting and language when he was confronted with a complex array of information and significant constraints of time and medium; to associate particular texts with others from the same set; and to situate this activity spatially and temporally (Palaima 2011). All of this allows for a very thick description indeed, and this fine-grained detail, when placed alongside our broader understanding of scribal practice in the Mycenaean world, offers the possibility for convincing and empirically grounded discussions of agency and production. Such analyses are far from trivial, because from an agency approach social practices *are* historical processes, not merely their consequences (Pauketat 2001, 74). In the course of writing a document, an individual necessarily makes use of a wide variety of structures—linguistic, of course, but also administrative, economic, ideological, and so on—that may be reproduced or changed while instantiated in the process of textual production. The result is that detailed studies such as those made possible by early writing provide important insights into social structures and macro-historical processes.

Interest in texts extends beyond the processes of their production and into their consumption. Texts often possess voices that imbue the inscription with agency. Svenbro (1993) has noted that Archaic Greek inscriptions prior to 540 BCE tend to "speak" in the first person—for instance, "I am the funerary monument of Glaukos"—and argues that this is highly significant in a culture in which most (if not all) individuals would have read aloud (see Carrasco, this volume). This significance is illustrated nicely by a Greek myth in which a young man named Acontius tricks a girl named Cydippe by rolling into her path an apple inscribed with the words "I swear by Artemis to marry Acontius"; Cydippe read the text aloud and the goddess held her to the vow. Inscriptions can therefore impose their will upon readers, forcing them to lend their voices to the text, or not to read at all, neatly reversing our "commonsense" expectation of an active human subject and a passive material object. Texts may be inscribed on plain stones, but it is also the case that inscriptions include iconographical elements (like Greek or Maya stelae) or are written upon artifacts like vessels or statues. As such, the objects on which early writing and texts are found are ostensibly archaeological entities, although this is downplayed in some scholarly traditions that emphasize the textuality

of an inscription at the expense of its materiality. The material agency of the inscription should be understood as a complex of interaction between material and text, as well as its context in space and time. The status of inscriptions as both material artifact and text allows us to explore multiple and overlapping aspects of their social agency, sometimes at a greater level of detail than is usually possible in purely archaeological contexts.

THE PRACTICE OF WRITING

If writing has much to contribute to the study of agency in archaeology, it is equally true that agency approaches have an important role to play in the study of ancient writing. Agency theories provide a useful frame to understand the very emergence of writing, which is a poorly understood phenomenon in many cultural contexts. Whereas the development of a given script is sometimes seen as the intentional invention of a single historical individual (see, e.g., Powell 1991, 2002), agency approaches urge us to see script development in a broader array of practices and structures, including iconography and semasiography (defined as writing with signs that are not linked to speech; see Robertson 2004). That is, agency moves the focus away from intentionality and event and toward practices and processes. At the same time, it allows us to negotiate the twin poles of event and process that remain so important to the study of early writing (Houston 2004a). Indeed, agency encourages us to see writing not as an artifact that once invented remains stable but as an ongoing process—a structure that is both the medium and outcome of individual episodes of writing and reading.

More generally, we argue that agency provides a useful framework for the integration of material and textual evidence. This issue is a problematic one in virtually every region where these two types of evidence can be mobilized (e.g., Bell 1987; Bennet 1988; Chase, Chase, and Cobos 2008, Houston 1989, 2000; but see Houston 1993 or the papers collected in Culbert 1991 for examples of effective conjunctive approaches). The problem tends to be that archaeology and text do not seem to talk to each other in straightforward ways. If, however, the discussion is reframed around the notion that agency and structure come together and are indistinguishable in practice, then archaeological and textual data can be combined in new and productive ways. We offer as proof of this assertion the rich array of approaches and results in the contributions to this volume.

GOALS AND ORGANIZATION OF THIS VOLUME

The careful reader will notice that we have studiously avoided providing a "working definition" of agency or the agency concept. In light of the multiplicity of definitions offered previously (see above; Dobres and Robb 2000, 3), this would be an exercise in futility. Providing a single definition of this abstract idea that will evolve through the chapters in this volume is not our goal. Rather, the collective goal of this volume is the dialogue—a dialogue that, through an interdisciplinary collaboration among art historians, epigraphers, prehistorians, and classical, historical, and anthropological archaeologists, assists in developing the concept of agency in archaeological practice (see Robb 2010). Because this dialogue has no fixed end point, we offer no specific concluding chapter that neatly and concisely sums up any definitive conclusions or inferences that may be drawn from the chapters as a collective whole or that puts a final point on the volume. Rather, we synthesize the individual contributions in this introduction and offer a brief epilogue that suggests some ways in which the dialogue may be continued.

This volume grew out of a session held in Atlanta at the Seventy-fourth Annual Meeting of the Society for American Archaeology in April 2009. Papers were presented by Bestock, Carrasco, Englehardt, Nakassis, Smith, and Wang Haicheng, all of which appear here in expanded form. The chapters by Jackson, Reichel, Anderson, and Johnson and Johnson were prepared especially for this volume. Jennifer Dornan and Ruth Whitehouse kindly agreed to provide a foreword and epilogue, respectively.

The fundamental goals of this volume reflect the primary aim of the symposium: to illustrate how a text-based perspective can clarify some of the problems and possibilities of using the concept of agency in archaeology. We seek to demonstrate that a focus on early writing and texts is both an appropriate and a necessary place to ask about agency in the past. As detailed above, the epigraphic record provides a different type of evidence, one that provides certain windows into individuals and/or agency, which radically differs from but also complements the archaeological record. Examining writing systems and early texts through the lens of the agency concept also has the potential to illuminate precisely those questions of individual intentions, consequences, meanings, and motivations inherent in cultural production, allowing for the identification and discussion of observable actors in the archaeological record. Such queries all too

often elude adequate explanation solely on the basis of material remains encountered in the archaeological record. The interdisciplinary, text-based perspectives offered in this volume thus seek to increase our understanding and aid archaeological interpretation of the historically particular subjectivities of past social actors.

The contributors to this volume approach the subjects and issues implicit in the above discussion of agency in a variety of ways, reflecting the diverse approaches current in archaeological, art historical, and, indeed, sociological applications. Nonetheless, common themes do emerge, and the contributions have been arranged in three sections. The first section, including the chapters by Jackson, Reichel, Smith, and Bestock, deals with agentive processes implicated in the formation of early writing and notational systems. These chapters explore the role of individuals in the development of scripts, as well as the contextual factors and cognitive aspects involved in the construction of meaning in emerging writing systems. The second section, comprising the chapters by Anderson, Carrasco, and Johnson and Johnson, explores agency from a more explicitly materialist perspective. These chapters examine the agency *of* early writing, addressing the agentive roles played by texts and the materiality of the written sign. In doing so, they seek to elucidate the relationship between the text as material object and its interpretation by the reading audience. The third and final section, encompassing the contributions of Englehardt, Wang Haicheng, and Nakassis, approaches questions of agency from a structural perspective. As such, these chapters examine agency as deduced *from* or *through* writing and early texts. Somewhat more historical in their approach, these authors explore the relationship between agency and structure in the interplay of epigraphic, historical, and archaeological evidence in addressing issues of how cultural structures and institutions both contextualize and are affected by the actions of individual agents as reflected in textual evidence.

Because of their temporal and spatial breadth, and the fact that each chapter explores a distinct script tradition, the contributions to this volume relate agency to the study of writing systems and its relationship to the archaeological record in different ways. As such, chapters and sections at once stand alone and complement each other. Although they may not flow seamlessly into one another, individual chapters should be seen as distinct voices in a dialogue, located at a variety of points along the continuum of current perspectives about agency and structure, from individual strategic action and motivation to the structural institutions that both constrain and enable such action. Of course, all chapters explore some of the issues that are

inherent in all considerations of agency, including individual intentionality, rational action and strategic motivations, the materiality of objects, cultural production and consumption, and the constraining and enabling effects of structure. Thus, it is rather more fruitful to conceive of this volume as an ongoing discussion among its participants. Each contributor offers a variation on the overall theme and incorporates different types of evidence and theoretical approaches to provide a unique perspective in the dialogue surrounding agency, epigraphy, and the utility of both in archaeological investigation.

INDIVIDUAL CONTRIBUTIONS TO THIS VOLUME

Margaret Jackson begins the discussion in chapter 1 by exploring questions of agency in the nebulous intersection of semasiography and "true writing" (as a graphic representation of spoken language) in various script traditions of the New World. She posits that agency is the common thread that unites particular signs within variable applications and allows for the construction of meaning in the transition between nonphonetic (i.e., pictographic, ideographic, or iconographic) and phonetically structured conventions of visual representation. Jackson suggests that the dichotomy between text and image is sterile and that, ultimately, semasiographic notations coexist with phonetic signs within early (and modern) scripts, serving a mediatory function that allows for the construction of new and sometimes variable meanings by an individual reader. Thus, Jackson emphasizes the crucial role of ancient human agents in making sense of visual signs. Implicit in her analysis is an exploration of the contextual use relationship between the object and human agent, which reveals the necessity of studying the materiality of ancient texts in their physical and social contexts. Jackson's discussion sets the stage for the chapters that follow insofar as she addresses issues of structural and situational context, the materiality of object, its presence and performance, and the individual construction and interpretation of meaning from ancient texts. Jackson's ideas regarding the context in which visual messages operate could quite easily be related to archaeological indicators present in the material record (such as the fineware ceramics she discusses in conjunction with Moche visual culture) or ethnohistoric evidence, for that matter. Ultimately, the concepts of place, agency, and vehicle that Jackson suggests are central to the derivation of meaning in early texts provide a useful paradigm for interpretation of seemingly disjointed traditions

of visual representation in the Americas.

In chapter 2, Clemens Reichel explores incipient Mesopotamian scripts in the Neolithic period. Reichel suggests that the emergence of Mesopotamian writing was inexorably linked to the growing needs of increasingly complex economic and administrative systems. Through an exploration of the agency of record-keeping in terms of the development of both early Mesopotamian script and states, he argues that writing in ancient Near Eastern contexts was a technological rather than conceptual innovation. Reichel creates a strong link between agents and the archaeological record by connecting writing with the specific actions of identifiable social actors, as well as sociocultural processes identifiable in the material record, such as stratification, economic specialization, and increasing sociopolitical, technological, and urban complexity. Stress factors related to political and economic development, coupled with the nature of accountable commodities in early Mesopotamian society, necessitated the establishment of a recording system that was able to track bulk, volume, and space, as well as specific numbers of particular countable items, to exert administrative control. The distinct yet overlapping record-keeping systems that developed to address the challenges involved in accounting for various factors of specific commodities coexisted for millennia prior to the emergence of true writing at the nodal point of seals, sealings, and texts. Writing emerged, Reichel argues, as the result of a synthesis of both recording systems and their associated procedures, largely to meet the expanding need to identify accountable administrative authority—be that authority an individual social actor or the bureaucratic office behind him. To some, Reichel's contribution may read like a more "conventional" textual analysis, in suggesting that the development of record-keeping, seals, and (eventually) written texts was necessary to support a complex bureaucracy. However, he moves beyond traditional analyses by suggesting that individual record-keepers were unwittingly complicit in enabling the particular social and economic structures that ultimately led to the formation of the earliest scripts. In this sense, Reichel illustrates the role of individual social actors (albeit nameless and practically unidentifiable) in the development of early writing and notational systems.

Like Reichel, Adam Smith sees the invention of writing as an agentive process in the structurationist or historical sense. That is, writing is not the result of a great master scribe but rather the cumulative effect of writing-like practices that span large geographical and chronological spaces. Scripts emerge primarily as a result of the unintended consequences of agentive practices over time. In chapter 3, Smith argues against direct individual control or intentionality in

the development of Chinese writing. He asserts that writing develops not from prescient design by scribes who envision the benefits of literacy but rather from extant practices of sign use or the manipulation of visual images when such practices undergo a process of "repetitious intensification." Agency exists in this scenario in material terms, insofar as the intensified replication of certain signs with "object-like" visual features leads users to an unconscious selection for a repertoire of signs with increasingly "word-like" visual features. Smith suggests that changes in socioeconomic contexts drive the process of repetitious intensification, which makes his model archaeologically traceable through material reflections of such sociopolitical transformations evident in the archaeological record. Thus, although individual social actors may not have had direct control over the developmental processes involved in the emergence of the nascent Chinese writing, the historically particular actions of certain agents effected unintentional consequences that indirectly influenced script development. In contrast to some of the other chapters, Smith downplays both the complexity of early pictographic and semasiographic notational systems and the importance of context. Nevertheless, he presents an alternate interpretation of agency and the role of agents in the emergence of writing—one that cannot and should not be ignored in this dialogue.

Laurel Bestock's chapter serves as a natural bridge between the first and second sections, insofar as she explores context-meaning relationships in the emergence of Egyptian writing, as well as the contextually specific agentive materiality of certain text-artifacts. Bestock suggests that the mortuary context in which early Egyptian scripts are found indicates a desire to communicate across the boundary of life and death to maintain the social identity and agency of deceased individuals. She is less interested in the actual content of the inscriptions and the specific information communicated therein. Rather, Bestock argues that early Egyptian mortuary inscriptions, as part of a suite of material objects, extended individual agency into the afterlife—in Gell's (1998, 36) terms, the inscriptions were secondary agents. Mortuary inscriptions thus served to preserve both the deceased's identity and social relationships, maintaining his personhood, role, and status in death. Bestock's analysis situates Egyptian burial texts in their various significatory and physical contexts and attempts to create a link between the texts and related categories of artifacts and ideological beliefs. Like Jackson (and, later, Englehardt), Bestock questions the distinction between "true writing" and representational art. Echoing Reichel's conclusions regarding the development of writing in Mesopotamia, she sees the emergence of writing as fundamentally linked to the rise of the Egyptian state,

locating writing at the intersection of material and ideological agencies—the physical control of goods, resources, and people and the social roles of and relationships between elite individuals that persist even after death. Bestock's approach also foreshadows the contributions that follow (e.g., Carrasco, Wang Haicheng) by explicitly focusing on the materiality of the sign and its presence as image and insisting that the context of early scripts is of the utmost importance to the interpretation of their meaning and functionality.

The first chapter of the second section, by Emily Anderson, is less concerned with identifying the processes involved in the development of early Cretan Bronze Age notational seals, focusing instead on the agentive materiality of the seal "scripts" as material objects. She examines the mutually defining interaction of the social identities of humans and objects, suggesting that people and artifacts participated in interaction as particular embodiments of distinct social identities within processes of seal use. Anderson suggests that as humans interacted with seal stones and impressions, and with other humans *through* sealings, the social identities of both objects and persons were actively construed. The distinctive stylistic and material attributes of a given object's materiality were incorporated into the object's own social identity as well as an individual's identity, insofar as human individualities were constructed through their interactions with the objects. As such, Anderson explores questions regarding the mutually defining relationship between object and audience, locating both material and social agency at the nexus of individual human action and the construction of meaning. In doing so, she makes the case that texts, in their materiality and use-context(s), had—and *have*—agency. Anderson moves beyond "traditional" textual studies and older, isochrestic conceptions of "style" by showing how seals had identities that actively affected their users and created ties between people and places. These novel ideas on identity and landscape in archaeological and textual interpretation are brought to the fore precisely because of an explicit emphasis on agency and the agency concept.

In chapter 6, Michael Carrasco also deals with issues of materiality and wider context. Like Anderson, Carrasco sees Maya inscriptions as artifacts in a broader material world and questions traditional interpretations regarding the nexus of human action and production of meaning as reflected in the Mayan script tradition. Carrasco examines Maya texts from the perspectives of genre, performance, and materiality to elucidate the relationships among object, audience, and meaning. He argues that the materiality of the support matters greatly to the function, meaning, and performativity of such archaeological objects. Ultimately, Carrasco suggests that the performative aspect of Maya inscriptions is only one facet of the object's meaning, and that

differences in genre between inscriptions and the material embodiment or presence of a given text are crucial components of both the agentive power of the inanimate text-artifact and the meaning that the reader ascribes to text. Certain visual representations of both texts and writing itself suggest that these cultural categories were charged with symbolic importance. Moreover, the syntactic structure of various textual narratives and dialogues presents the text-objects as possessing the ability to directly "speak" to the reader, imbuing such written artifacts with a self-referential agentive power. Although it is important to understand the performative context of Maya writing, Carrasco argues, the meaning of a monument or text comes just as much from the power of its textual presence as it does from its narrative or visual content. Thus, writing as embodied in particular media and as part of specific genres of discourse may be thought of as having its own unique material agency.

Cale Johnson and Adam Johnson continue the focus on the materiality of text-artifacts in chapter 7, following the ideas introduced in the contributions of Bestock, Anderson, and Carrasco in examining the complex relationships among text as archaeological object, interpretant, and meaning. Echoing Smith, Johnson and Johnson explore the contingencies involved in processes of recontextualization in the development of writing systems, specifically focusing on several mid-third millennium BCE texts written in an encrypted form of cuneiform known as UD.GAL.NUN. Like Reichel, although they are unable to identify particular individuals (other than specific scribes) in the inscriptions, Johnson and Johnson are able to discuss in great detail the ways in which cuneiform-inscribed tablets were crafted and produced, ultimately disassociating agency from the conscious actions of individual social actors (echoing Smith). In contrast to Smith, Johnson and Johnson conceive of agency more in terms of individual free will, insofar as scribes enjoyed "moments of contingency" while replicating standardized texts. These moments affected not only the development of UD.GAL.NUN but also the structures in which such texts were crafted. The ultimate goal of their analysis is the reconstruction of sequences of archaeological deposition of these text-artifacts, as well as the agentive forces that drove and shaped such depositional sequences. Johnson and Johnson suggest that in UD.GAL.NUN texts, the comingling of a given sign and its own externalization created gaps or contingencies that necessitated textual innovation to preserve the coherence of the text as a complex whole. In a sense, Johnson and Johnson explore what one might call scribal *habitus* (Bourdieu 1977, 1990a), insofar as they argue that social structures are of the utmost importance in understanding how scribes faced contingencies and introduced innovation into the textual

tradition to preserve or construct new meanings. As such, their contribution touches on a theme present in some ways in all chapters but most fully explored in the subsequent section—the notion that the practice of writing was imbricated in power relationships.

In chapter 8, the first of the third and final section, Joshua Englehardt picks up on the ideas of Johnson and Johnson regarding the effects of sociocultural structures on emerging textual traditions and the power relationships expressed therein, exploring questions of agency in Maya writing from a more structural perspective. He focuses on identifying two aspects of agency in early Maya iconography and texts: the intentionality and historically particular strategic motivations of individual social agents identified in inscriptions, as well as the sometimes unintended structural consequences of the actions of specific individuals. Building on both practice theory and structural historicism (cf. Bourdieu 1990a; Sahlins 1989, 1995), Englehardt seeks to identify agency in the interplay between historical process and event and between structure and individual action. In doing so, he provides an appropriate use of the "individual free will" view of agency, demonstrating how known individuals purposefully engineered texts (and styles) to shape a new political structure via syncretism—a structure that then acted back on those (and other) agents. Individual agents identified in certain Maya inscriptions, both consciously and unconsciously, transformed social realities, thus playing integral roles in structural change. Such transformations in sociocultural structures are identifiable in the archaeological record. Englehardt is interested in the objective strategies of the social actors involved in a historical event as well as the (sometimes unintentional) structural effects of their actions, seeking to illustrate both the individual and the collective aspects of the structure-event dialectic. He thus demonstrates how textual evidence has the potential to permit a combination of two traditional approaches to the agency concept: individual elite strategy and the role of human action in the structure-event dialectic. Englehardt concludes that the production and consumption of material culture, including texts and iconography, serve to advance the strategically motivated intentions of specific social actors, whose agentive actions feed back into structural and cultural institutions to contextualize, enable, and give meaning to both individual action and the production of written and iconographic texts in the Maya world.

Similarly, in chapter 9 Wang Haicheng explores the conscious intentionality of ancient agents identified in early Warring States period Chinese texts inscribed on three bronze vessels recovered from the tomb of the king of the state of Zhongshan. Wang thus examines comparable issues of political maneuvering of elite strategists, albeit

in distinct temporal and spatial contexts. Like Englehardt and Johnson and Johnson, Wang suggests that agency is located within the discourse among practice, structure, and historical event and that it is reflected in material goods. He also maintains that agency is intimately linked to power relationships, particularly in terms of how social identities are created, maintained, and manipulated. In addition, Wang argues that depositional context is fundamental to the interpretation of texts, echoing sentiments expressed in several other chapters, particularly that of Bestock. Wang is interested in deducing the specific motivations of the authors of a particular text. In this sense, he seeks to elucidate human intentions as reflected in the inscription—a fairly straightforward epigraphic endeavor. Nevertheless, Wang deftly shows just how difficult it is to extract this kind of information, despite the wealth of data we have regarding the inscription itself—it is complete, and we understand its archaeological context and may read its content. To understand the texts inscribed on the bronze vessels, we need to know about the processes that led to its inscription, but we have only the result, the artifact. Crucially, Wang injects elements of historical archaeology into his discussion, facilitating the comparison of textual and archaeohistoric evidence and allowing for a more precise identification of social agents in ancient inscriptions, as well as a fuller comprehension of the meaning of individual actions as deduced from texts in their capacity as artifacts. In interpreting such texts, Wang argues, context and process must be considered paramount. Doing so allows Wang to illustrate the motivations, intentions, and consequences of the actions of political agents in the Zhongshan kingdom.

The intentional strategy on the part of elite individuals explored by Englehardt and Wang is not the only thing that agency theorists are interested in, of course, and in the final chapter, Dimitri Nakassis argues that agency is about more than just elite politics, using Linear B inscriptions from the Bronze Age Mycenaean site of Pylos. Although Nakassis does not offer a specific political history of Pylos per se, he does end up speaking to political maneuvering, insofar as the developing Pylian state is both constrained and enabled by individual practice in the structurationist sense (see Giddens 1979, 1984). The mundane and quotidian activities detailed in the texts Nakassis examines provide a window into the social structure and institutions that contextualize individual action and concrete social practice. Insofar as individuals are socially constituted entities, agency cannot be reduced to simple strategic intentionalities, he argues. At the same time, Nakassis insists, sociocultural structures are not independent, static entities but rather are instantiated in the practice of social actors. Although Nakassis's textual evidence appears to identify

individuals as little more than names, administrative titles, or bureaucratic offices (recalling Reichel's Mesopotamian seals), his data ultimately suggest that the state and its structural institutions were historically produced and reproduced through interaction by all types of historical actors in various social contexts—not simply high-status individuals in elite ritual contexts. Thus, concludes Nakassis, rather than being an impersonal, faceless bureaucracy, the state is a dynamic social process, one reflected in the Linear B textual records produced at Bronze Age Pylos.

FINAL CONSIDERATIONS

No agency approach can possibly provide a unified scenario for the development of writing that fits all times and places. That is not the point of this volume, and none of us pretends to offer such a "one-size-fits-all" model. Likewise, we do not suggest that the contributions collected here address or represent all possible theoretical or empirical permutations implicit in the application of the agency concept to the study of early writing, or vice versa. Indeed, many of us do not consider the ways in which the technology of writing may have had agency. Nor do the chapters here explicitly address questions of ancient literacy or means of production, insofar as these may be brought to bear on the agency concept and the role of agents in developing writing. It is clear that the dialogue we have started here must continue if agency and texts are truly to become archaeological concerns.

Our initial abstract for this panel at the Atlanta meetings of the SAA in 2009 was relatively limited in scope: we hoped that the panel would shed light on the role of "real, observable actors (and actions) in the archaeological record." That is, we sought, perhaps somewhat simply and naively, to put some names and faces to the "faceless blobs" that populate archaeological discourse (Tringham 1991, 94) and thereby to ground archaeological discussions of the agency side of the agent/structure duality. The embarrassment of riches that emerged from the panel, our continuing discussions, and the additional chapters written afterward demonstrate that our approach was far too narrow. Indeed, we have been continually struck since then how important writing is to the study of agency in archaeology, and agency to the study of ancient writing, in multiple and overlapping ways. We hope that this volume contributes to an appreciation of and the further inquiry into the richly productive relationship between these two areas of research.

PART I

Agency i n the Formation of Early Writing and Notational Systems

ONE

The Mediated Image
Reflections on Semasiographic Notation in the Ancient Americas

Margaret A. Jackson

In recent years, the long-standing model of a dichotomous relationship between text and image, a mainstay of the semiotic approach to visual communication, has fallen increasingly under criticism.[1] Our daily interactions with computers and icons of all kinds make it obvious that the world is populated by countless varieties of conventionalized and codified visual signs that operate outside the strictures of language. There are any number of visual codes that are neither purely text nor purely image. This realization is reflected by increased scholarly attention and greatly expanded curiosity about the workings of these alternate forms, which are known as "semasiographies." This shift ultimately makes the present analysis possible.

Scholarship on semasiography ranges from discourse analysis and visual culture studies to linguistics and cognitive science. It is a challenging array of disciplines; the category includes everything from symbolic diagramming and math to transit maps and, of course, pictographies and hieroglyphics—genres of great interest among Americanists. Such multiplicity points to the fact that "semasiography" is actually an umbrella term covering a range of graphic systems and operative structures.

Sometimes called "discourse systems" or "nonphonetic writing," semasiographies are capable of conveying relatively specific information in codified or conventionalized form, but they are not designed to directly reflect speech. Scholars such as Brice (1976), Sampson (1985), Boone (2004), Boone and Mignolo (1994), Elkins (1999), Houston (2004a, 2004b), Jackson (2000, 2008), Martin (2006), and others have sought to define "semasiography," which is based on the Greek *semasia* ("meaning") combined with *graph* ("drawn/written"). Yet, just as with words like "writing" and

“pictures,” the concept encompasses a vast, contested territory, making an absolute definition elusive.

Semasiography refers to those conventionalized systems of visual notation arranged primarily around nonphonetic principles of ordering whose overall meanings are derived from the spatial and/or performative relationships among the constituent elements. Semasiographies may incorporate a range of meaningful elements, including phonetic signs, logographs, ideographs, pictures, or direct material relationships. The systems are distinguished from complex iconographies by their capacity to create and record new information (Boone 2004, 317—18; Martin 2006, 76). They seem to work best (and occur most often) within strictly limited areas of reference (Sampson 1985, 30; Brice 1976, 41—43), even though, in theory, it need not necessarily be so.

Semasiographic systems are often active participants, or mediators, within specific performative contexts, as suggested by the title of this chapter. The idea of mediation is used here in its most traditional sense, that is, as something occupying an intermediate place or position, one that, in some instances, serves to mediate between parties to reconcile or bring about an accord or understanding. It is not used in its most contemporary sense, as a word that connotes a situation where traditional forms, like print or painting, have become “media” through translation into digital or electronic form—that is to say, older forms that become “remediated” (see Bolter and Grusin 1999, 34–50).

Because they focus less on phoneticism, semasiographic models offer a flexible—and less value-laden—way to address visual systems that are not directly tied to spoken language. This does, in fact, represent a new paradigm for studies of Ancient American visual art. The Saussurian dialectic that dominated semiotic discourse for most of the twentieth century, elaborated in what follows, has strongly affected the ways in which indigenous visual cultures in the Americas have been approached, in many cases perpetuating the idea that native people were illiterate (with the attendant pejorative associations). Semasiographic studies represent a means by which to alleviate and (one hopes) eventually eliminate this particular colonialist stigmatization. Apart from the social considerations, the introduction of a revised paradigm allows us to better understand and differentiate among communicatory approaches that may have varying degrees of verbal, visual, or other sensory modal components.

The focus of this chapter, therefore, is to illustrate different semasiographies through drawing attention to several Ancient American examples, summarizing some of the key features

distinguishing them, not necessarily decoding the meanings of those examples but rather suggesting the places where semasiographic functions occur. In doing so, it becomes possible to discern variable quantities of pictures, phonetic signs, and operational structures in each visual tradition, which, in turn, bear important correlations to agency and, ultimately, to the kinds of meanings that can be extrapolated from particular object categories.

WORD/IMAGE

The notion that a *sign* is something that conveys an idea about a thing originates with Charles Sanders Peirce in his now-famous tripartite categorization of signs as icons, indexes, and symbols. Peirce describes an *icon* as a sign possessing the character of that which makes it significant (the more imagistic of the three), *indexes* show something about things because of their close connection to them, and *symbols* are associated with their meanings through conventionalized usage (growing from icons or mixed signs and characterized by varying degrees of codification). Ferdinand de Saussure's subsequent work served to recast Peirce's terminology, linking it in no uncertain terms to Saussure's concept of the *linguistic sign,* contesting the basic meanings assigned by Peirce in several key regards. In the Saussurian view, signs reflect highly arbitrary relationships between the signifier and that which is signified. (Language as a reflection of ideation serves as his prime example.) Along this line, and generally applied across disciplines, *sign* has come to mean a signifier retaining no vestige of any "natural" relationship to its source, lying in contrast to *symbol,* which may retain some likeness to its subject and carry more generalized associations of meaning. In the present chapter, Peirce's fundamental tripartite relationships among icon, index, and symbol are retained. As a designation, *sign* is used in its limited sense, to mean conventionalized forms whose traces arise from arbitrary or abstract relationships between signifier and signified. When intended in any broader sense, sign is qualified here by the addition of modifying adjectives. *Symbol* is meant to suggest a form with a relatively generalized base for conventionalization and interpretation, and *icon* and *index* retain essentially imagistic, relational connotations.

Writing is often described as a graphic representation of speech—a visual system whose primary focus is on the replication of spoken communication (Coe 1992, 13; Marcus 1992, 29). Although some authors suggest that writing is "any systematized graphic activity that creates sites of interpretation and facilitates communication and sense making" (Boone 2004, 315, citing Rotman 1995, 390), typically and

traditionally, written scripts are categorized as those that record speech by phonetic values (as with alphabets) or those that do so according to meaning (logographs). Generally echoing a widely accepted dialectic, articulated at length by Saussure and others (Saussure 1983; Foucault 1993), semioticians have tended to place phonetic writing (spoken sound–based signs) in opposition to pictures (figural imagery). Visual signs more closely related to words have been posited as having a higher degree of discursiveness, and those that are more imagistic have been regarded as more figural (Bryson 1981).

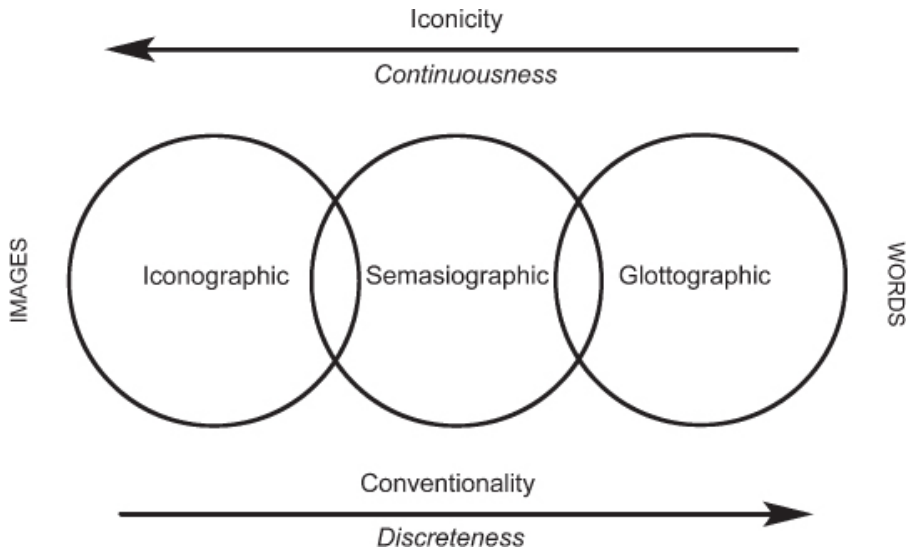


FIGURE 1.1. Word-image dichotomy (based on Martin 2006, 63).

Within a dichotomous model of word and image, semasiographies are conceived as existing somewhere between phonetic writing and pictorial imagery (Martin 2006). Any graphic form not purely phonetic or purely pictorial falls somewhere along a continuum, either more or less conventionalized and glottographic or with more or less iconographic or pictorial component (Figure 1.1).

Early attempts to clarify this intermediate territory include work by Charles Owen (1986), who placed linear sequential writing in opposition to "presentational" picturing (e.g., imagery with no conventionalized or fixed manner of reading). According to Owen, graphic systems residing between linear discourse and presentational images are hybrids, characterized as having configurations of symbols rather than strings of symbols. He noted that, because sequential systems, such as alphabets, are encoded linearly, they must be transmitted, received, and decoded in a strictly defined order; conversely, presentational systems are usually not linear-sequential in their method of communication and therefore may be decoded from

more than one starting point. According to Owen, writing is at one end of the discursive scale, followed in descending order by mathematical systems, ideographic languages, and pictographies. These are followed by complex symbolic diagramming systems, such as music notation, Blissymbolics (a transit system notational form), dance notation systems (like Kinetography and Labanotation systems), complex process diagramming, sequence experience notation, and motation. Ultimately, he positions representational drawings, photographs, television, movies, and iconic models as the most presentational (non-sequential) visual forms (Owen 1986, 167–68).

The model of a dialectic continuum becomes problematic at this juncture, however, because certain genres, like mathematical charting systems that involve time, systems diagrams, organization charts, and concept presentations, show little or no sequential or grammatical structure, even though they clearly involve discrete sets of signs and operations. Such systems are almost entirely presentational (configurational) but are not idiosyncratic. It becomes almost impossible to correlate levels of phoneticism with discursive capacity in these systems. This observation creates an impasse of sorts, pointing to a problematic aspect of the binary model and signaling a paradigm whose center is intellectually unwieldy.

In *The Domain of Images,* James Elkins (1999) challenged the basic premise of the dichotomy, pointing out that there is no such thing as "pure" writing or pictures; all images are both "read" and "seen" simultaneously. They mix words, letters, marks, and iconic images within a larger experience of color, substance, and visual format. One cannot read words on a page without simultaneously seeing the size, color, and materiality of the page itself, nor can one view a picture without also being subjected to canonic structures governing formalist presentation and symbolism. Temporal duration and social function likewise affect discursive structures. To acknowledge this, and to address the enormous variety of visual forms occupying the intermediate territory, Elkins argued that graphic constructions like maps, diagrams, emblems, and schemata actually constitute a third node of visual communication, best referred to as Notation. A modified semiotic model would thus have a tripartite composition (as in Figure 1.2).

No longer would graphic forms fall *only* along a continuum between iconicity and conventionalization, but they would also have varying degrees of operational and/or spatial correspondences. Within this conception, the overlapping area again constitutes the realm of semasiography, but with greater differentiation. Hieroglyphics continue to reside somewhere between writing and pictures, whereas

emblems and schemata, less phonetic but still conventionalized and logographic, situate more toward the Notational node. Mathematical script, with its high degree of conventionalization, finds its place even closer to Notation. In articulating the character of the semasiographic and notational categories, it becomes possible to distinguish the different components of graphic systems that include variable quantities of pictures, phonetic signs, and operational structures.

OPERATIONAL SEMASIOGRAPHIES

If a visual system is not intended to replicate speech per se, then what modalities does it engage? Nonphonetic graphic systems have the capacity to engage almost any cognitive branch, and they communicate across sensory modes. In many cases, their ability to mediate ideas distinguishes them as functional cognitive tools.

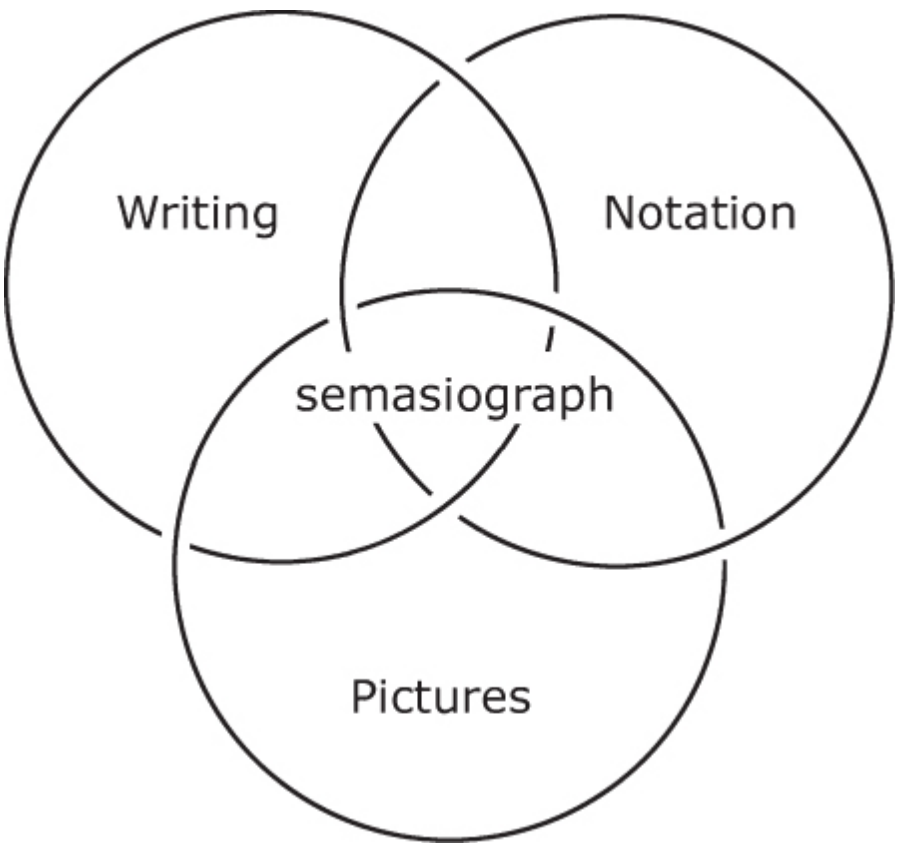


FIGURE 1.2. Writing-pictures-notation tripartite model (modified from jackson 2008, figure 4.2).

Mathematic script, for example, employs specialized signs for numbers, things, and actions to communicate spatial relationships

between signs and operatives. Meaning is conveyed through the relative position and size of the symbols, and changes in positional relationships can significantly alter the overall meaning of any given grapheme (e.g., 2^a means something quite different from a^2 or $^a/2$ or $^2/a$).

In addition to denoting complex quantitative or spatial relationships, such notations play a dynamic role as functional mediators. When math characters are manipulated in algebraic context, one can "solve" for unknown information. Because the values of the numerals and operatives change according to the spatial configurations in which they are placed, the characters and formulas can actually function to aid in calculation and conceptualization. Certain formal configurations, such as tables, can allow a reader to calculate predictable moments (as in almanacs or train schedules; Figure 1.3). Likewise, diagrams and models can allow viewers to visualize spatial relationships (like chemical or molecular structures).

CAPITOL CORRIDOR–Weekday Westbound

Train Number ▸				521	523	525	527	529	531	533	535
On Board Service ▸											
	Mile	Symbol									
Sparks, NV–The Nugget	0		Dp								
Reno, NV	3										
Truckee, CA	38										
Colfax, CA	102										
Auburn, CA (Grass Valley)	0							6 35A			
Rocklin, CA	14							6 58A			
Roseville, CA	18				4 45A	5 35A		7 08A			
SACRAMENTO, CA	35		Ar		5 20A	6 10A		7 37A			
			Dp	4 30A	5 30A	6 20A	7 00A	7 40A	8 30A	9 20A	10 10A
Davis, CA	49			4 45A	5 45A	6 35A	7 15A	7 55A	8 45A	9 35A	10 25A
Suisun-Fairfield, CA	75			5 09A	6 09A	6 59A	7 39A	8 19A	9 09A	9 59A	10 49A
Martinez, CA	93			5 30A	6 30A	7 20A	8 00A	8 40A	9 30A	10 20A	11 10A
Richmond, CA	112			5 55A	6 55A	7 45A	8 25A	9 05A	9 55A	10 45A	11 35A
Berkeley, CA	118		Dp	6 02A	7 02A	7 52A	8 32A	9 12A	10 02A	10 52A	11 42A
Emeryville, CA	120		Ar	6 08A	7 08A	7 58A	8 38A	9 18A	10 08A	10 58A	11 48A
			Dp	6 10A	7 10A	8 00A	8 40A	9 20A	10 10A	11 00A	11 50A
OAKLAND, CA –Jack London Square	125		Ar	6 21A	7 21A	D8 18A	8 51A	D9 38A	D10 28A	D11 18A	12 01P
			Dp	6 23A	7 23A		8 53A				12 03P
Oakland Coliseum, CA	130			6 32A	7 32A	8 25A	9 02A	9 45A	10 35A	11 25A	12 12P
Hayward, CA	138			6 43A	7 43A		9 13A				12 23P
Fremont-Centerville, CA	150			6 59A	7 59A		9 29A				12 39P
Santa Clara-Great America, CA	161			7 16A	8 16A		9 46A				12 56P
SAN JOSE, CA ▣ Santa Barbara	168		Ar	7 35A	8 35A		10 10A				1 15P

FIGURE 1.3. Train schedule illustrating spatial correspondence of time and distance in graphic format.

These systems are obviously not vehicles for the recollection of narrative, and their internal syntaxes do not assume linguistic sequence. They are essentially tools for thought. As notations, they function predominantly as *operational* semasiographies, where meaning is derived specifically from the operations for which they were developed. In relation to Ancient American visual traditions, many of which are clearly notational, but differ dramatically from one culture to another, several examples of what appear to be operational systems are recognizable in the archaeological and ethnohistoric

record.

In a 2004 essay, Elizabeth Boone (2004, 329) articulated an operational concept in relation to Ancient Mesoamerican manuscripts, presenting two excellent examples of Aztec divinatory books, which she likened to tables and charts. Boone noted that the opening pages of the Codex Borgia are schematized into the form of a table (see Figure 1.4; see also Boone 2004, figures 11.22, 11.23). Known as an *in extenso* almanac, the 260 days of the calendrical cycle are presented within the organizing structure of twenty day signs repeated thirteen times. The grid structure places deity patrons and mantic scenes above and below. The person using the document would count to the appropriate day and, depending on what mantic elements were associated, be able to extract shades of meaning associated with particular days.

FIGURE 1.4. Aztec *in extenso* almanac page with day signs, deities, and mantic signs. Codex Borgia, page 7 (Diaz and Rodgers 1993); courtesy of Foundation for the Advancement of Mesoamerican Studies, Inc. (www.famsi.org).

Similarly, Boone noted that the famous quadripartite page from the Codex Fejérváry-Mayer is analogous to a diagram (Figure 1.5; see also Boone 2004, figures 11.24, 11.25). Its spatial configuration forms a cosmogram of a quadripartite universe, something its Aztec users would have considered a conceptual truth. It additionally expresses the 260-day calendar, in the form of a small ribbon of dots looping around the perimeter. As with the previous example, the proximity of various parts of the image created conceptual linkages for the person using the document. It is not an idiosyncratic mnemonic device; it contains well-understood graphemes and served as an active tool for the creation of knowledge.

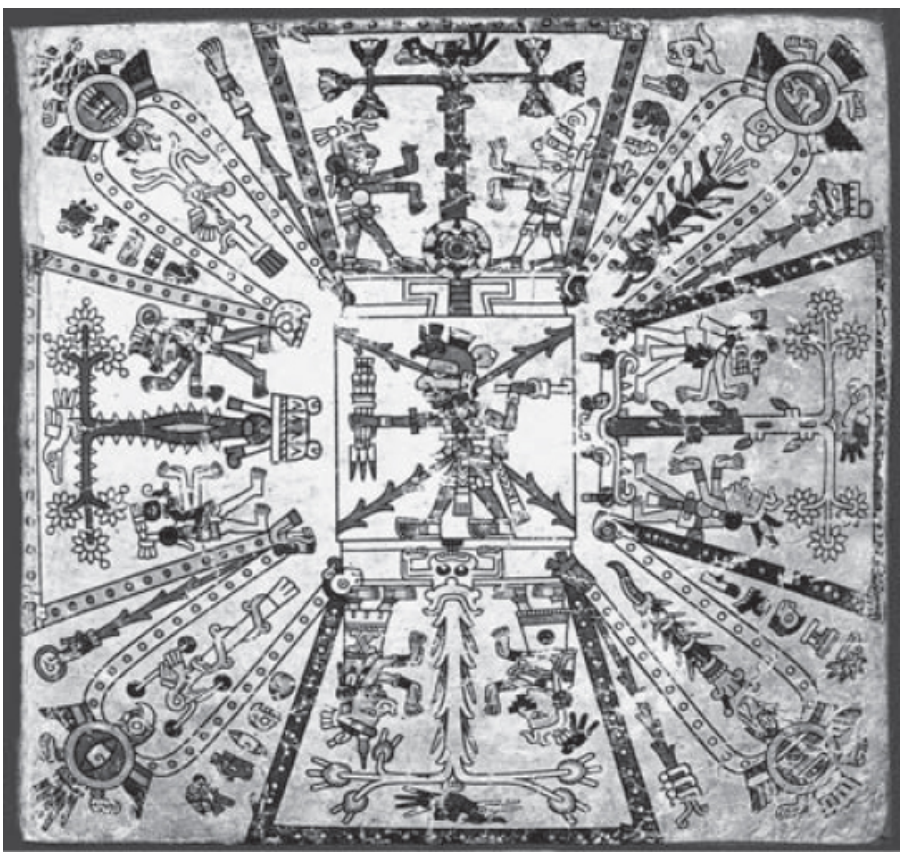


FIGURE 1.5. Almanac page with cosmographic diagram. Codex Fejérváry-Mayer, page 1 (Pohl 2003a); courtesy of Foundation for the Advancement of Mesoamerican Studies, Inc. (www.famsi.org).

In the Andes, a very different sort of operational device deserves similar consideration. The Andean knotted string *khipu* also served as a dynamic vehicle for information processing (Figure 1.6). In Inca society, these were used for accounting and, to a less well-understood degree, for communication of narrative elements (Quilter and Urton

2002). Khipus were not counting devices; they did not function as a calculator or an abacus in the sense of moving knots around during the process of mathematical calculations. Neither were they mnemonic structures akin to the medieval European "memory theater," the Art of Memory so eloquently discussed by authors such as Yates (1966) and Carruthers (1990). Nor did khipus function like rosary beads, simply as placeholders for those who would recite memorized materials. By virtue of mutually agreed symbolic values, the knots and strings functioned as readable notations, legible to those persons trained in their workings (Urton 2003).

FIGURE 1.6. Inca khipu (Lowe Art Museum, University of Miami, gift of Hosmer Compton, 91.0361).

Khipus recorded information by means of a primary trunk cord, with pendant and subsidiary cords, each with conventionalized knots and colors. Although they potentially included phonetic signs or other logographs, khipus were not designed for the purpose of replicating language. To record information, khipu specialists placed knot-signs in appropriate configurations and in correct relationship to other signs. Reading and operating a khipu depended on these same informed specialists to serve as interlocutors. Information was given voice as a result of readers' interactions with the khipus and other objects like counting stones or *yupana,* or on occasions of ritualized "telling" events (Harrison 2002, 279; Platt 2002, 259). As with numerical charts, the values associated with any given knot-sign depended on internal relationships of knots, strings, and position within the

structuring framework.

The physicality of the khipu played a part in how meaning was encoded, perhaps more so than with two-dimensional graphic traditions. It has been suggested that the tactile and physical processes by which the objects were made had direct bearing on how information was parsed, and it is possible that a khipu's sequence of construction is an indicator of its information sequence (Conklin 2002, 56). Yet, as with the almanac pages, the extraction of information seems to have been at the discretion of human agents. An oral telling of a khipu might proceed from one end to another in order, but not necessarily so. It seems that pendant clusters might also be read in variable order. The spatial arrangements between clusters of information remained fixed regardless of how the orator chose to explicate them. Although still a subject of some debate, it seems likely that the kinds of information that could be derived from khipu resulted, in some degree, from the ability of the reader to draw conclusions from distinct information clusters or possibly from cross-referencing multiple khipus (Urton 2005), much the same way that a reader would draw conclusions from reading other kinds of charts or tables.

In each of these examples, the visual systems contain elements of specific information, yet, unlike a dictionary or encyclopedia, they were not static repositories of data. Instead, they provided operational vehicles for thought processing—their full discursive potential is best recognized when seen as part of a dynamic notational function. Although they conveyed information, they were designed to create meaning at the moment of use. Informed by social contexts operating outside themselves to be given voice, these semasiographic constructions required mediation on the part of an informed viewer and, in turn, generally functioned to mediate real-time experiences.

NARRATIVE SEMASIOGRAPHIES

A number of important indigenous American visual traditions function to recall history, genealogy, or other kinds of narratives. Yet, unlike scripts that reproduce language using a discrete corpus of phonetic signs and sequential internal syntax, they are generally pictorially based. Such traditions are not idiosyncratic, however, and many of them contain embedded phonetic signs and glyphic clusters. Particular emphasis is given to storytelling within pictorial structures.

Among the most well studied are the *res gestae* manuscripts of Oaxaca, the famous dynastic histories of Eight Deer, Lady 6 Monkey, and others, whose lives and exploits are chronicled in colorfully

painted screen-fold manuscripts, like the Codex Nuttall and Codex Selden (Figure 1.7). These pictorial narratives are characterized by long sequences of painted figures arranged as small clusters of characters engaged in specific actions and events. The primary focus of each grouping is on actions taken by constituent subjects who are involved in marriages, wars, journeys, and oracular consultations.

The corpus is also deeply penetrated with glyphic elements that conveyed text-like information, such as status markers, temporal markers, naming devices, and locative indicators. Many of these are phonetically informed signs, logographs, or rebus devices embedded directly into iconographic structures (Smith 1973). Basic signs were modified through addition of adjectival qualifiers and other determinatives to create specific information, as, for instance, compound glyphs used to indicate proper names.

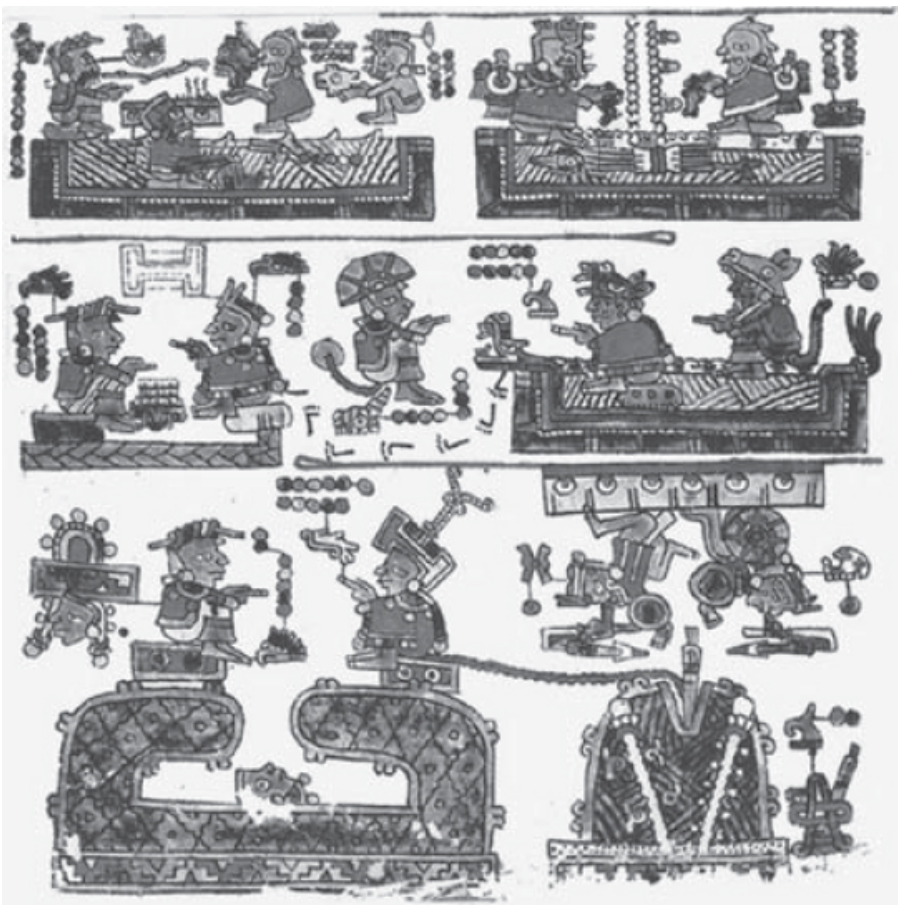


FIGURE 1.7. Mixtec res gestae manuscript page. Codex Selden, page 1 (Pohl 2003b); courtesy of Foundation for the Advancement of Mesoamerican Studies, Inc. (www.famsi.org).

The viewer's eye is allowed to absorb each gestalt, digesting various iconographic modifiers in no fixed order. A series of relatively clear delineations of pictorial space guides the viewer's attention from one image cluster to the next. Red lines insinuate a meander pattern for the overall composition of these lengthy screen-fold books. The spatial presentation gives the impression of temporal sequence, although elements of time and place are subservient to the intersection of participant and event (Boone 2000). Conventionalized signs, like footprints, arrows, and gestures, indicate specific actions.

Although they clearly are intended to function as narratives, they are not replications of speech. They were mediatory devices in the hands of skilled singers or readers, who performed them and used them as part of larger social events (Byland and Pohl 1994, 9; Jansen 1988, 89; Martin 2006, 87; Monaghan 1990, 1994). They provided vehicles for remembrance and construction of identity; simultaneously, their stories reinforced political structures and claims to rulership. Their configurations drew on larger social understandings and conventions to be given voice. As such, an undeniable aspect of agency is implicit in their construction.

As objects, the codices served as vehicles for the stories they carried and as mediatory paraphernalia for performance-based oratory. Their physical form surely carried certain kinds of social meaning, or even political ramifications, but they were not functional objects in any utilitarian or household sense and their imagery was not secondary to their main function. Their overriding emphasis and purpose was on narrative—but *not* on replication of a specific language. They carried out their task without directly emulating language, even though there is little doubt that by the Late Postclassic period (AD 1200—1520), the Mixtec would have had ample exposure to other Mesoamerican script traditions, which they might have adopted had they chosen to do so. Because these documents were highly portable and served a multicultural ruling elite that existed in a politically fragmented environment, it may have been more useful to create records that were legible to speakers of multiple languages—a context in which semasiographic narrative proved highly desirable.

PERFORMANCE-BASED SEMASIOGRAPHIES

Because semasiographic notations develop in response to particular needs, the range of possible applications is vast. Among those that rip across sensory modalities, freely mixing materials, images, and actions

and translating ideas and stimulae from one cognitive realm to another, are some that are best considered as performance based. As with operational semasiographies, they employ a range of conventionalized signs whose meanings are largely derived from internal relationships. In most cases, they are designed to mediate specific communicatory junctures. Spatially dependent and keyed to kinesthetic performance, these semasiographies have meaning that is generated through composite actions and interactions of participants, meaningful objects, and situations.

International road signs provide a familiar contemporary example for gauging the various parts of such communication systems. As graphic images, road signs are often touted as being purely ideographic; the person viewing the signs need not speak any particular language to understand them. The person *must,* however, know something about driving a motorized vehicle, for this action provides the common frame of reference by which all participants are united. The signs feature images describing road conditions, events, activities, rules, and commands. If these signs were spoken, the system would be composed primarily of descriptive noun phrases with a high degree of correlation between image and referent. These combine with several arbitrary conventions to convey specific instructions to the viewer regarding how to respond; for example, a circle with a diagonal slash means prohibition, a yellow triangle signals caution, and so forth. The context within which the message operates is strictly limited and understood as a given—the viewer is in motion, moving forward and driving on the road.

FIGURE 1.8. Road sign in context (photo by Carlos A. Ferrer, 2010).

The messages are conveyed in the form of simple autonomous visual phrases. They are not sequences of ligatured ideas; there are virtually no structures from one road sign to another that one might construe as analogous to sentences. The system is limited in that it expresses almost no complex information about spatial or temporal relationships outside of the viewer's immediate experience. The physical demands of driving—making appropriate stops, negotiating curves, and so forth—are signaled to the viewer in a way that presupposes a spatial relationship among sign, driver, and road (Figure 1.8). It is assumed that the viewer is engaged in a particular activity (driving a moving vehicle) whose parameters are generally known to the creator of the visual signs. In this regard, the creator of the signs and the person driving on the road share a common narrative attached to a sequence of actions—essentially, a shared meta-narrative.

The road signs illustrate several key features of this type of semasiography. Visual phrases are not necessarily linked in any overt way from one to another. The system is widely understood by people engaged in a shared activity, but it is not language dependent or intended to replicate language. The sign system is task oriented, and as such, it has a limited functional context. Human agency is the thread that connects the disparate parts. The system has recognizable elements that supply a *place, agency,* and *vehicle* to allow for the completion of a particular activity. For drivers using road signs, place is represented by the road as the location of travel. Agency is provided by the human actor engaged in active travel, interacting with physical space based on sensory cues. Moreover, the road signs are the vehicles for communicating information and directives.

The key role played by human agency makes the workings of such systems particularly difficult to understand in archaic culture groups. The archaeological record does, however, offer a means by which to hypothesize the parameters of ancient performance-based semasiographies through employing a model of place, agency, and vehicle. The contexts in which discursive systems appear, and the functional evidence of how they were employed, provide significant insight into how they may have been organized for particular culture groups or purposes. What appear at first to be unrelated arts may, in fact, be related by shared meta-narrative and performance actions.

Moche visual culture of Peru (AD 100—800) offers a possible example of how this relationship might work. Moche's visual corpus is widely recognized for its vivid imagery in a range of materials and sometimes regarded as strictly pictorial, but its meanings become more apparent when placed in larger social context. It was not

composed of multiple unrelated motifs; its components were actually complementary parts of a system held together by ideologically informed agency(s). Like the road signs, the larger semasiographic functioning of Moche visual culture incorporates multiple seemingly unrelated elements in ways that depended on broad cultural knowledge of participants for the construction of its deeper meanings. Moche's specialized imagery is primarily repeated in three interrelated venues: monuments, elite costume and performance arts, and liturgical arts. Together these represent the place, agency, and vehicles associated with a broad cultural meta-narrative.

Moche monuments were clearly a primary venue for assertion and affirmation of ideological constructs, figuring dynamically in the creation of social narrative. These were the sites of ceremony and blood sacrifice. Prominent in almost every North Coast valley, they featured elaborate architecture and massive step-platform pyramids. Usually emblazoned with murals and friezes, these pyramids had iconographic programs that reiterated well-known religious icons and themes. Monuments like the Huaca de La Luna, with its enormous and dramatic great plaza, were the staging areas for performance of rituals, ideal for enacting all manner of elite celebrations (Figure 1.9). Archaeological excavations of the pyramid's upper areas confirm that the sacrifice of prisoners depicted in imagery, in what is sometimes referred to as the Warrior Narrative (Donnan and McClelland 1999) or the Sacrifice Scene (Donnan 1978), did in fact occur in real life (Bourget 1997; Verano 2001). The fundamental ideology attached to these sacrificial events appears to have underlain all aspects of Moche politics and ritual practice, for it was visually invoked time and again throughout many centuries and over sizable territory. The pyramids stood as physical embodiments of faith—places where politics, social identity, and religion coalesced.

FIGURE 1.9. Mural cycles, north frontis, Huaca de La Luna, Moche Valley, Peru (photo by Margaret Jackson, 2008).

Costuming and public performance jointly constitute a second area of significatory expression. Together, they supported the executive aspects of agency—they were both part of and prop for the compelling sequences of events to which the iconography refers. In particular, headdresses, tunics, and jewelry were elements in an extensive performance paraphernalia (Figure 1.10). The lavish costume accouterments of elite burials at Sipan, San Jose de Moro, Huaca de La Luna, and elsewhere are prime examples, by which we have come to identify specific characters, such as the Lord of Sipan or the Priestess of San Jose de Moro (Donnan 1988; Donnan and Castillo 1992), and specific participants in ritual activities, like the Priest in the Coca-Taking Ceremony (Uceda 2008). The paraphernalia, which included elaborately decorated earspools, headdresses, warclubs, and tunics, signaled an individual's social role and performance expectations. Familiar thematic or iconic motifs often embellished the objects, marking them as part of a larger schema. The donning of particular attire provided a means for the assertion of status—status that was presumably reinforced by the successful completion of certain ritual obligations. Public presentation and pageantry associated with important events surely provided grand political theater and material for social narrative. Over time, those accouterments became indexical markers in their own right.

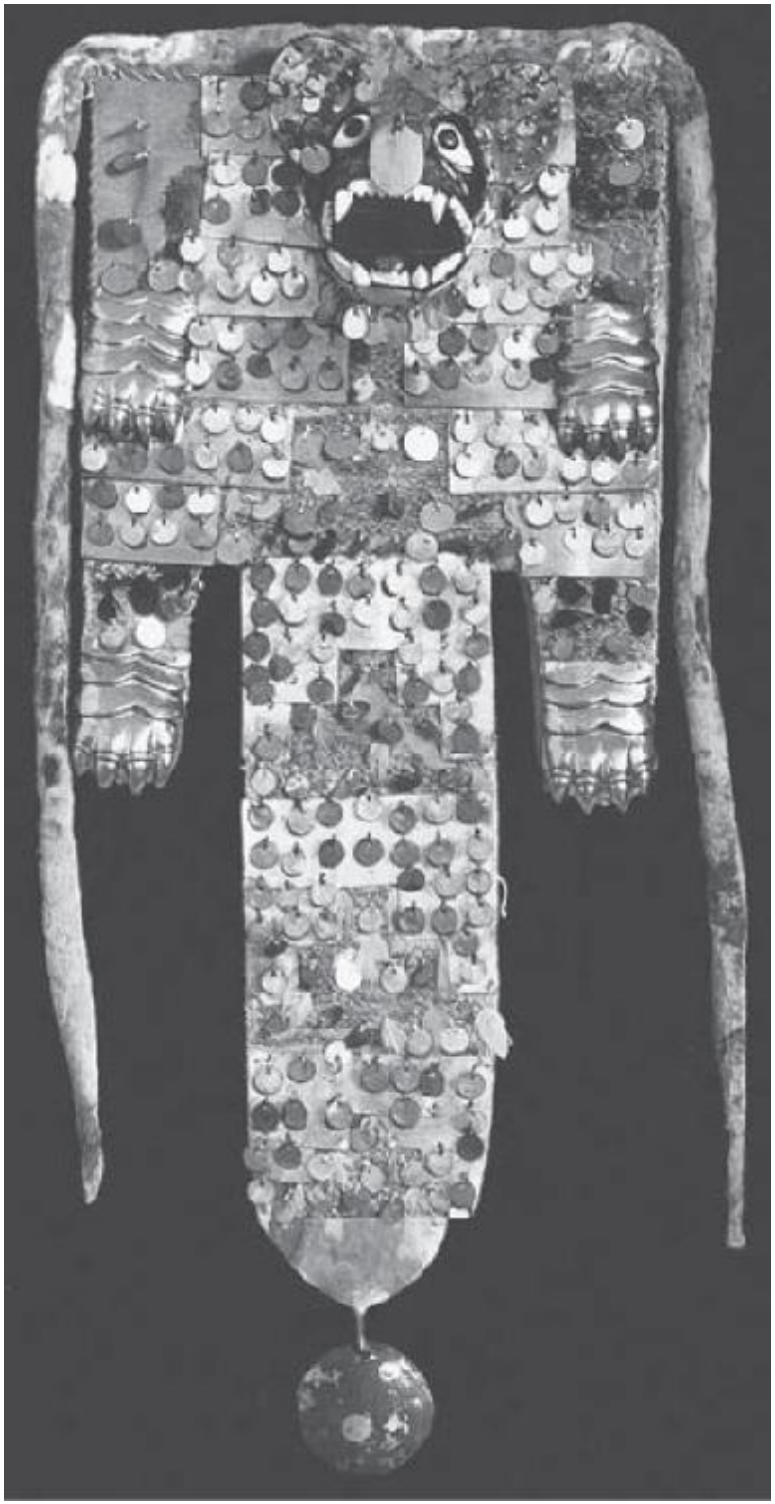


FIGURE 1.10. Feline gold spangle headdress, associated with the

Priests of the "Coca-Taking Ceremony," Huaca de La Luna (Proyecto Huaca de La Luna, Platform 1; photo by Steve Bourget).

FIGURE 1.11. Moche stirrup-spout bottle shaped as conch-shell trumpet with deity emerging (ML003208, Museo Larco, Lima, Peru).

Finally, liturgical arts, which are predominantly represented in the archaeological record by fineware ceramics, were the hands-on *vehicles* mediating the observance of religious ritual. Such ceramics include specialized vessels, like stirrup-spout bottles (Figure 1.11), pedestal cups, and flaring vases, as well as figurines, talismans, and musical instruments (Jackson 2000, 2008). The formal characteristics of this special-use assemblage remained remarkably constant over

time; today, these forms are most often associated with funerary contexts. In life, the evidence suggests that they had at least a limited amount of specialized use before interment. Each form likely carried particular liturgical expectations. In a few ceramics, trace elements of human blood have been detected (Bourget 2001, 95; Bourget and Newman 1998; Donnan and Castillo 1992, 1994), suggesting that these were the very same ceramic assemblages used in rituals like the Sacrifice Ceremony. Often painted with complex scenes or elaborate appliqué elements, these were the objects that called to the gods, that poured the libations, and that visually recounted key concepts and narratives during ceremonies and feasts. They too became independently iconic over time.

These three cultural expressions—monuments, elite costume and performance arts, and liturgical arts—announce and reaffirm religious belief while actively mediating distinct social assignments. The feasts, ritual toasts, blood sacrifices, musical ceremonies, and social enculturation were all acts of agency mediated by the use of fineware ceramics, special garments, and elite architecture. Although seemingly independent, the genres shared a visual vocabulary that was widely understood and that reiterated religious ideology again and again. Their primary tasks were informed by the larger demands of the overarching social order. Their formal characteristics and iconographies were keyed to the demands of the tasks involved, and as such, their visual codes served a limited functional context. Casting them within a communicative framework of place, agency, and vehicle allows us to address them as part of a larger social narrative whose parameters are signaled by their presence. They derived meaning from each other, ultimately serving as referents or indexical references in imagery and cutting across sensory boundaries to include communicative modes other than language.

COMPOUND SEMASIOGRAPHIES

Semasiographies are particularly interesting for their capacity to simultaneously create meaning on multiple levels. Objects that derive meaning from performance contexts, for example, may also include narrative, or even operational, aspects. Artifacts and architectural structures have a particular use-life from which meaning is derived; simultaneously, they are able to serve as vehicles for images, signs, or narrative scenes painted or fixed on them.

Moche fineware ceramics offer a case in point. The extraordinary longevity of forms like stirrup-spout bottles, *floreros,* and effigy jars and the ways in which their iconography became stylized and

abbreviated over time attest to their importance as part of a suite of performance arts, as described above. In addition, Moche ceramics are famous for their elaborately modeled and painted imagery, so complex and long-lived that it eventually began to function discursively in its own right. This iconographic tradition drew on larger cultural practices to supply critical components and indexical markers in the construction of meanings that were generally keyed to larger societal narratives.

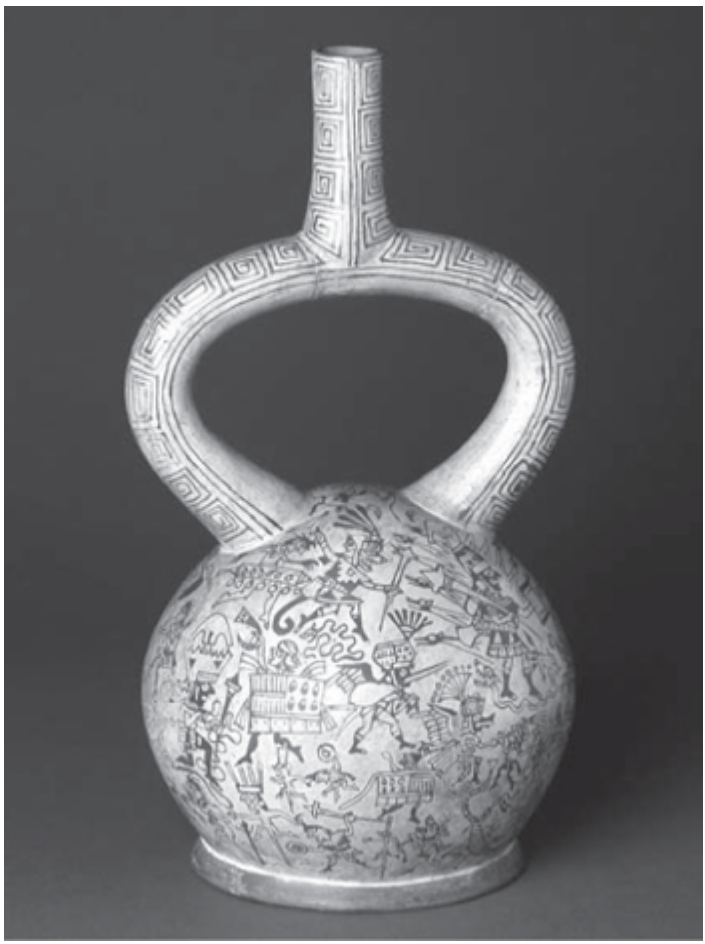


FIGURE 1.12. Moche stirrup-spout bottle, "Revolt of Objects" theme (Staatliches Museum für Völkerkunde, Munich, nr. 30-29-7; photo by Marianne Franke, 2008).

In the late-period painted scene, known as "Revolt of the Objects," a number of internal devices help the image to resolve into narrative moments (Figure 1.12). These create syntactic order within a configurational format. In the scene, several distinct cohorts are spread around the surface of the picture plane. Like small vignettes, they form what are basically clusters of action phrases (Jackson 2008,

2012). The image is loaded with numerous compound icons and conventionalized elements. The rayed Warrior Priest, the Owl Warrior, and the Priestess command the dramatic action of three main areas. Significantly, they derive their identity from elite costuming and performance arts. It is also noteworthy that their actions take place at a pyramid, a primary locus of power.

The figures are part of a frantic battle in which clothing, weapons, and other objects are shown as animate beings struggling against anthropomorphic warriors. The action clauses form narrative nuclei whose focus is on the act of taking prisoners. Each small nucleus features a primary subject and one (or more) direct objects linked by an action marker. Again, the referents that inform these indices have real-world correlates that can be identified in Moche material culture.

Various internal pointers and gestures make clear the nature of the interaction and the direction of movement. Specific conventions include arms and legs that animate, headdress and accouterments that indicate status identity, grasped forelock and inverted warclub to show defeat, and architectural structures, flora, and fauna to show location. Specific hand gestures exchanged between various characters are particularly conventionalized. They include pointing, a thumb to forefinger "O" gesture, an open hand with palm up, and a grasping gesture (Donnan and McClelland 1999). The forelock grasp specifically indicates conquest and capture. Moreover, there is no doubt about the prisoner status of this deer-headed captive. His deer head makes it clear that he will later be sacrificed.

The scene exemplifies Moche's characteristic form of configurational (presentational) syntax. Unlike imagery with alphabetic script, the notational aspects of this type of imagery placed relatively little precondition on the viewer, apart from familiarity with Moche's overarching belief system, oral traditions, and knowledge of public religious observance. The fact that these scenes appeared on specific kinds of objects, whose meanings ultimately derived from physical enactments of religious ideology in what was essentially a meta-textual matrix, is what distinguishes them from narrative semasiographies, such as the Mixtec res gestae codices, in which the primary emphasis appears to have been on storytelling and oratory. The Moche did not develop paper or parchment versions of these images. The painted scenes were first and foremost part of a larger suite of ritually informed objects and architectures whose iconographic meanings cannot be divorced from the materiality or functional purpose of the objects on which they reside. Although it is tempting to interpret the imagery hermeneutically, their primary meanings ultimately derived from the performative agencies they

mediated.

COMMENTARY

The range of examples presented here leads to several observations. First, and perhaps most obviously, all semasiographies are not alike. Semasiographic forms include a range of discursive systems whose internal structures and social functions vary radically. As the tripartite model of notation, writing, and pictures suggests, some semasiographies are more akin to charts and operational schemata; others are more pictorially narrative, many with embedded logographs and complex relational structures; and still others are highly abstract with significant inclusion of phonetic components. The examples used here have been selected with the aim of illustrating this point.

At the same time, it is important to note that these visual systems resist definitive categorization; each one may potentially operate simultaneously on multiple levels. Thus, it is not correct to say that a predominantly operational semasiography cannot also contain a narrative aspect or that a performance-based semasiography might not also carry an embedded narrative component with logographic or even phonetic signs, as Moche fineline painting demonstrates. No communication system operates in a singular mode of cognition, just as no avenue of human perception exists isolated from other simultaneous strands of stimuli. Phonetic writing follows a logic dictated by linguistic syntax, ostensibly because its task is to replicate speech; other notations fulfill other kinds of tasks, and their compositions reflect those goals.

What semasiographies have in common seems to be an active agency. Indeed, because these systems tend to be tailored to specific contexts, one cannot understand their logic without considering agency. In each of the examples mentioned here, the primary meaning of the visual construction derived from the relationships among context, human participant, and object—a complex amalgam here referred to as place, agency, and vehicle.

The motivations for semasiographic development appear to have little to do with recording speech. Semasiographies can allow for the mixing of discursive forms that cross the boundaries of sensory modalities. Because they do, they easily incorporate phonetic elements when useful, but they also have the capacity to work in concert with other communicative, performative, or computational genres. The choice of media is not always two-dimensional or graphic, and elements often transfer from one distinct sensory mode to another

(movement, speech, sight, picturing, enacting, and so forth). Different elements transfer readily from one mode of ideation to another. Their internal organizations tend to be relational, rather than linear sequential, with signs arranged as clusters or configurations. These notations may perhaps *use* language as a component element, but they are not *about* language. Such systems are fundamentally about agency; they are interactive, and designed to be so, essentially operational in their expectation.

Studies of semasiography essentially understand images and objects as having an active life outside their representational role, be it as ritual objects, transformative costumes, or operational tools. They mediate and are mediated. They emphasize relationships with other images and expressive modalities. Searching for these connections—the spatial and cross-modal junctures—provides new ways of understanding Ancient American visual culture.

NOTE

1. Portions of this chapter were presented at the 98th Annual College Art Association Meetings, Chicago 2010.

TWO

Bureaucratic Backlashes
Bureaucrats as Agents of Socioeconomic Change in Proto-Historic Mesopotamia

Clemens Reichel

Writing systems, at their most fundamental level, are visual manifestations of established social norms and contracts. Such a notion is well expressed in a comment by the noted Assyriologist Ignace J. Gelb in his book *A Study of Writing* (first published in 1952), where he stated that "[w]riting began at a time when man learned how to communicate his thoughts and feelings by means of visible signs, understandable not only to himself but also to all other persons more or less initiated into the particular system" (Gelb 1969, 13). What Gelb vaguely referred to as a "particular system" is the very breeding ground for writing, a society at a crucial point of its socioeconomic development when the abstraction of the spoken word into symbols becomes desirable or unavoidable. It is the role of the scribe in Mesopotamia in this particular constellation that I shall make the focus of this study.

No study of the agency of writing can be complete without considering Mesopotamia, home to some of the oldest civilizations known to us. To many scholars of the past this is where it all began, including writing. Gelb's own studies on this topic still reflect a strongly diffusionist stance in which, as paraphrased by Cooper (2004, 71), "writing was invented in Babylonia just before 3000 BC, very soon stimulated the development of writing in nearby Egypt, and by means not well understood eventually stimulated the development of writing in China some 1500 years later." Over the past decades Gelb's approach, which clearly reflects influences from V. G. Childe's work (Childe 1952), has been superseded by more region-based studies that take account of local development and idiosyncrasies. Scholars now agree that writing "was invented more than once, as the Mesoamerican evidence compels us to believe, it could have been

invented four times" (Cooper 2004, 72). Mesopotamia may no longer be considered the cradle of all writing systems and, according to recent discoveries in Egypt, it might not even have the earliest known inscriptions.[1] Such caveats, however, have not diminished the significance that Mesopotamia holds for our understanding of the impact that the development of a writing system has on society. Rather unusually, the precursors to Mesopotamia's writing system, which can be traced back over millennia, are well-known. "True" writing finally emerged between 3500 and 3000 BC, at about the same time that a highly urbanized society manifested itself in Mesopotamia. My present study will address the mutual impact that urban society and the writing system had on each other's development.

When looking for individuals and individualism behind the emergence of Mesopotamia's writing system, we are confronted with several problems. Data for scribal traditions in *historical* Mesopotamia (after 2500 BC) are abundant—we often know the scribes' names, their patronymics, exact titles, overlords, and sometimes even elements of their characters. Such traits by definition are more difficult to recognize in prehistory. The scribe himself remains nameless, but his actions and abilities can be discerned from the artifacts that were left behind for us. The scenario evoked in my subsequent discussion not only echoes Adam Smith's doubts about "intelligent" designs behind most writing systems to some degree (see Smith, this volume) but even suggests a certain "inevitability" in the emergence of an early Mesopotamian writing system. It would be thoroughly misleading, however, to see the Mesopotamian scribe as a "reactionary" who simply mimics newly established social and behavioral norms in writing. During a crucial time between 4000 and 3000 BC, scribes became significant agents that spurred social and economic changes in a fashion similar to those later observed during the Mycenaean period in Greece (cf. Nakassis, this volume). Their actions helped to establish and maintain the subsequent state societies of Sumer, Babylonia, and Assyria, which dominated vast parts of the Middle East for millennia and even affect our modern-day society to a significant degree.

DEFINING DATA SETS, AGENTS, AND ENVIRONMENTAL SETTINGS

The origins of writing in other parts of the world, such as Egypt, China, and Mesoamerica, may be less obvious because of Mesopotamia's larger numbers of religious, political, and even symbolic early texts. In Mesopotamia, hundreds of thousands of

administrative and economic documents, written on tablets in cuneiform script using the Sumerian and Akkadian language, show that the origins of its writing system are undoubtedly bureaucratic. To some degree, the large number of surviving texts can be explained through the writing material itself. Unlike paper or papyrus, clay is cheap and omnipresent in the Middle East. Once discarded, tablets do not disintegrate—they are protected by the surrounding soil until retrieved in excavation. A fire destruction, which will completely destroy documents made of organic materials, actually helps to preserve tablets by baking them, making them even less susceptible to disintegration. Much of what we see now as Mesopotamia's "bureaucratic record" may have been discarded in antiquity and survived by accident. Even if we account for such heirlooms, however, the number of tablets still reflects Mesopotamia's inherent systemic need for highly organized bureaucratic systems.

Writing as a syntax-based recording system emerged only around 2500 BC. Before that, most records consisted of lists of commodities and names that were prefixed by numbers and quantities. Recording a quantity (bulk or volume) versus a number may not make much of a difference to the present-day literate reader, but these two practices were based on very different recording systems that predated writing in its proper form. Whereas the former was based on sealing clay lumps that were attached to containers and doors, the latter used tokens or counters, as will be described below in more detail. Writing itself, as will be shown in this discussion, emerged at a key point in Mesopotamia's socioeconomic development, essentially merging both recording systems.

Because much of the following discussion relates to prehistoric materials, my use of the term "scribe" in this context could be questioned and considered inappropriate. By using the term "pre-scribal" in prehistoric context I hope to emphasize a functional continuity between prehistoric and historic recording systems. Since early Mesopotamian writing is largely bureaucratic, the use of the term "scribe" versus "bureaucrat" requires clarification. We cannot determine with certainty if "scribes" and "bureaucrats" always were one and the same or if each bureaucrat had his own scribe(s). Here we have to concede the limits of our data resolution. In prehistoric context we cannot attach names to agents nor can we be certain that such an action was carried out by a single person. In the following discussion, therefore, an "agent" can be an individual or an "office" and held by several individuals who used—or shared—official status markers in an administrative context.

The impact that landscapes and geographical factors had and

continue to have on the social and economic development of societies has been discussed widely, often to a degree of an environmental "determinism" in which human action itself is perceived as "reactionary," as a mere adjustment of systemic practices to environmental challenges.[2] It would, however, be equally misleading to ignore local environmental preconditions altogether in a discussion of the development of a society. Man may shape nature, but nature, as I will show in the following discussion, also affects man's individual decisions. The archaeological sites to which I shall be referring in the following discussion are located in two fundamentally different zones (see Figure 2.1).

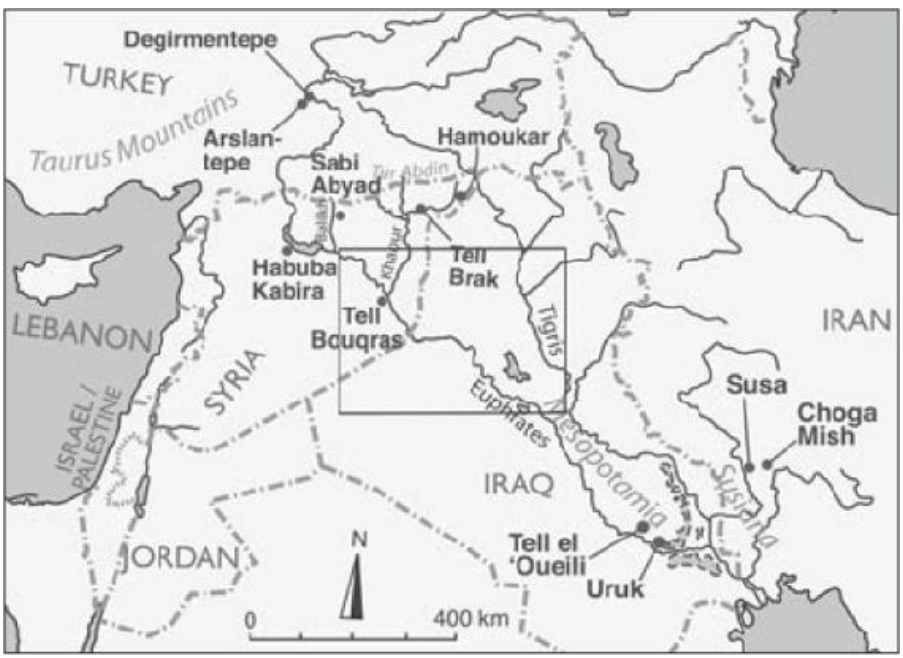


FIGURE 2.1. Map of the Near East, showing sites discussed in text (map by the author).

Southern Mesopotamian Alluvium

Located in modern-day southern Iraq and southwestern Iran, the southern Mesopotamian plain, crossed by its principal rivers Euphrates and Tigris, represents a highly asymmetrical landscape that clearly challenged and directed human agency in numerous ways.[3] It is an alluvial plain created by heavy sediment loads carried by the rivers from the Turkish and Iranian mountains during flood episodes following the annual spring snowmelt. Over time, these deposits have altered the landscape significantly, raising its plain level by up to fifteen meters in the past 5,000 years. Increased sedimentation also

caused river meanders and avulsions, resulting in significant changes to river courses. These changes also affected our archaeological data set. With many early sites obliterated or covered by several meters of mud, our knowledge of early archaeological sites in this area remains very limited. This modern-day challenge for archaeologists, however, merely reflects a situation that has shaped human development in this area over millennia. A floodplain that essentially consists of fertile silt, southern Mesopotamia has vast agricultural potential. Because annual rainfall rates between 20 and 50 mm are insufficient to allow for rainfed agriculture, however, canals have to be dug from the rivers to irrigate the fields after the sowing season. In addition, dikes need to be constructed to keep floodwaters away during harvesttime in spring. The positive feedback of irrigation agriculture on the social and economic development of societies that are centered on and influenced by river systems led Karl Wittfogel (perhaps somewhat dogmatically) to devise his model of early "hydraulic civilizations," including those in Mesopotamia, in the Nile and Indus Valleys, and along the Yangtze River in China. In Wittfogel's view, the labor input needed for the creation and maintenance of large-scale irrigation systems required a high degree of labor management, which led to surplus production, craft specialization, and an increasingly stratified society (Wittfogel 1957). Wittfogel may have overstated the significance of irrigation in the urban formation process. New paleoenvironmental data suggest that, during the late fifth and early fourth millennium BC, Mesopotamia's climate appears to have been significantly moister than today (Algaze 2008, 41–49). More recent discussions on Mesopotamian urban developments, therefore, have emphasized its geopolitical position as a decisive factor in both state and urban formation process. Emphasizing southern Mesopotamia's position "at the head of an enormous dendritic transportation system" (the Tigris-Euphrates river catchment area) Algaze (2008, 50–62) suggests that the low costs for bulk transports on rivers and canals compared to land-based transport served as a key factor in this region's socioeconomic development. Between 4000 and 3000 BC, large urban centers emerged; Uruk, the largest one, extended over an area of 250 hectares.[4] The presence of a large number of public and religious buildings that covered a sizable part of the city's area attested to the presence of a multi-tiered political, social, and religious hierarchy. An increasing need to organize taxation, storage, and redistribution of staple and traded commodities required the development of administrative systems, resulting in the emergence of an elaborate bureaucratic apparatus. In Mesopotamia, as I will discuss below, this trajectory led not only to the formation of highly urbanized societies but also to the emergence of scribal traditions.

Northern Mesopotamia's Upper Plains and Foothills

The areas to the north, by comparison, presented a very different setting. The plains of northern Mesopotamia—corresponding to present-day northern Syria and the foothill mountains of southern Turkey—are part of an ancient cultural landscape that extends from the Levant across the plains of northern Syria and the foothills south of the Taurus Mountains in southern Turkey to the slopes of the Zagros Mountains in western Iran. Characterized by a tempered climate that favored forests and grasslands with a variety of huntable species, this area contained some of the oldest traces of human habitations in the ancient Near East.[5] The "Agricultural Revolution," which after 9000 BC emerged in this area and spread from it, was favored by annual rainfall rates of more than 200 mm, which allow rain-fed agriculture without the burden of irrigation (Akkermans and Schwartz 2003, 2–7). To the present day, the settlement pattern in this area is dominated by agricultural villages that in the past interacted with nomadic and seminomadic pastoralists. This area never quite saw the scale of urban expansion found in southern Mesopotamia, but it provides crucial settlement data on early complex village communities (ca. 6500–4000 BC). Although shorter and smaller in scale than in southern Mesopotamia, periods of urbanism occurred during the fourth and third millennia BC (Akkermans and Schwartz 2003, 181–210).

For the purpose of our study, therefore, southern Mesopotamia provides data from large-scale, urbanized settlements in which a fully fledged writing system gradually emerged after 3500 BC. The "prequel" to this developmental process is visible at village communities and proto-urban centers in northern Mesopotamia. In spite of their geographically different origins, these data sets provide a consistent overall picture of the development of early bureaucracies and, as we shall see, the role of scribes during the emergence of urban structures.

ACCOUNTING FOR BULK AND VOLUME: INDIVIDUALIZED PRE-SCRIBAL AGENCY IN NEOLITHIC VILLAGE CONTEXTS

Writing, as mentioned above, emerged as a combination of two recording procedures: one accounting for bulk volumes and numbers,

and the other for numbers. To understand the role of "scribal" agency (based on my definition above, I shall use the term "scribe" even in a prehistoric context) in pre-urban context it is necessary to discuss both systems, paying tribute to their respective socioeconomic settings.

The basic tools to account for bulk and volume were clay sealings, attested throughout the Neolithic period and early Late Chalcolithic period (ca. 6500–4500/4000 BC).[6] Essentially they are lumps of clay that bear impressions of one or several seals on one side and impressions of movable items, such as jars, bags, and baskets to which they had been attached, on the other side (Figures 2.2a–c). Frequently, these containers had been closed with a string—bags were tied up while jars were covered with a lid and a piece of cloth that was fastened around the neck of the jar. The resulting knot in the string usually was embedded within the clay, after which it was impressed with one or multiple impressions of a seal. Once the clay had dried, the attached container could be opened only by breaking the sealing. With unauthorized openings noticeable, the integrity of a commodity "under seal" was guaranteed.

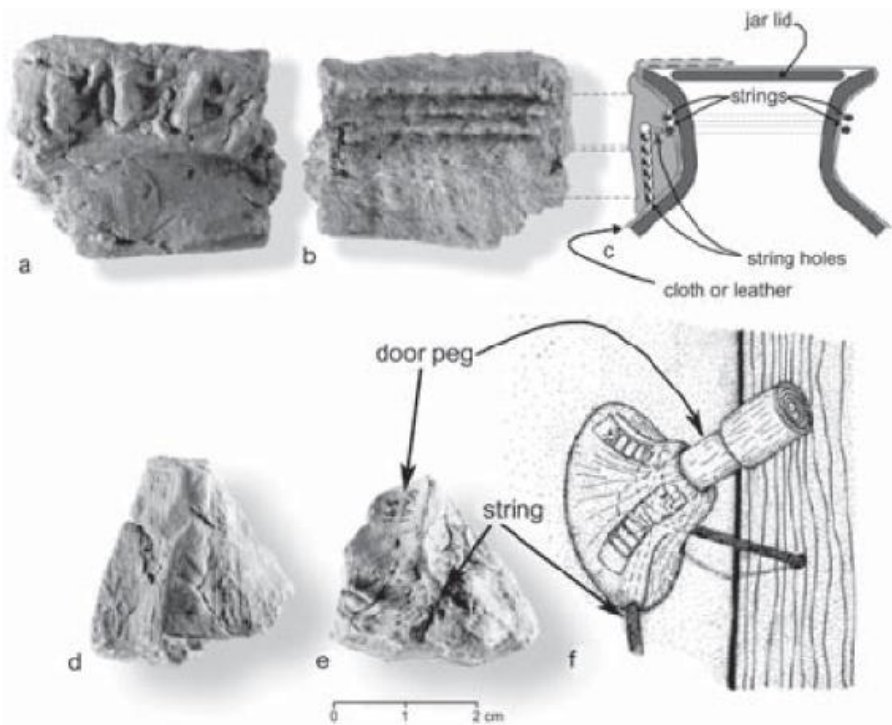


FIGURE 2.2. Clay sealings: (a) front, (b) back, and (c) reconstruction of a jar sealing (from Hamoukar, ca. 3500 BC, Deir ez-Zor Museum); (d) front, (e) back, and (f) reconstruction of a door sealing (from Tell Asmar, Iraq, ca. 1900 BC, Oriental Institute Museum). Images a–c: courtesy of Hamoukar Expedition, Oriental Institute, University of

Chicago; d–f: courtesy of Diyala Project, Oriental Institute, University of Chicago.

The seals used from the so-called Halaf period (6500–5000 BC) onward were stamps made of wood, bone, shell, or stone (Figures 2.3).[7] Perforations found on many of them suggest that they were suspended from a string, hence worn around the neck or wrist. Their shapes and appearances varied greatly, ranging from abstract to figurative. Because many are in the shape of animals or body parts, it is quite likely that they also were used as amulets or talismans. Among smaller social groups, such status markers would have been individually recognizable so they could have served various functions, from providing protection to visually identifying individualized agency in socioeconomic transactions and events. During the Halaf period the use of seals, therefore, was individualized or, at most, family-based. Containers closed and sealed within domestic bounds could be surrendered to non-family-controlled space without relinquishing control over their contents.[8]

The variety among seal designs was limited, initially showing abstract but later also figurative motives. Many of these motives likely represent family or "tribal" markers, once more suggesting their use among smaller groups in which such repertoires would have provided sufficient distinction. This observation generally fits the settlement pattern of Halafian village communities, which rarely extend over more than a few hectares but mostly seem to represent hamlets. Much of the space within larger settlements, such as at Sabi Abyad on the Balikh or Tell Bouqras on the Middle Euphrates, was devoted to large centralized storage facilities consisting of large sections with small, square or rectangular rooms arranged in a checkerboard or grid pattern, representing granaries that presumably were accessed from the roof, or long, narrow rectangular rooms with access along their short sides.[9] Such units would have been outside the spatial control of family boundaries. Sealing sacks of grain or other food products stored here, therefore, not only identified them as family property but also ensured that no one could open them unnoticed.

FIGURE 2.3. Stamp seals (and modern impressions), black stone, showing dancers, from Hamoukar, Late Chalcolithic 2 (Deir ex-Zor Museum, 4500–4000 BC). Photographed by author.

ACCOUNTING FOR SPACE: INSTITUTIONAL AGENCY IN PRE-SCRIBAL TRADITIONS

As far as we can tell, all sealings associated with the Halaf period were container sealings, restricting control to the items that they sealed but not extending it to the space in which they were stored. Such control is first attested during the subsequent ‘Ubaid period (ca. 5500–4500 BC; see Henrickson and Thuesen 1989), signalizing not only a new level of socioeconomic complexity but also the emergence of new agents that used seals. The earliest evidence for this shift was found at Degirmentepe, a site in southeastern Turkey that showed evidence for specialized copper production from the ‘Ubaid period onward (Esin 1989, 137). Most of the 450 sealings found at this level in a clearly non-random pattern were container sealings, originally attached to jars, reed baskets, leather bags, and wooden boxes (Esin 1994).[10] One of them, however, showed what appear to be impressions of wall plaster and a wooden peg; hence, it appears to have closed a door (Esin 1994, 69, figure 7.5; cf. Figures 2.3d–f). Just as in the Halaf period, containers with food or manufactured items continued to be

sealed before being deposited in external storage locations. The Degirmentepe door sealing, however, if identified correctly, attests to the appearance of a new bureaucratic procedure in which the door to a storage unit also is sealed to control access to it. Closing the door of a storage room with a seal added another layer of security, because unnoticed access to containers inside now required access to two seals that were located at different places. In terms of agency, the individual or family behind the container seal now was joined by a specialized authority that controlled administrative space, showing the gradual emergence of a bureaucratic apparatus. This function might have been held by one or several individuals who shared not only a position but also the use of a seal. A door sealing, accordingly, represents not *individual* but *institutional* agency.

URBAN REVOLUTION AND THE BUREAUCRAT: "DEPERSONALIZING" SCRIBAL AGENCY

By the late fifth millennium BC, the transition from the Neolithic to the Chalcolithic period, data from southern Mesopotamia increasingly become available. By the beginning of the fourth millennium BC, southern Mesopotamia takes precedence in the development of scribal agency. As indicated earlier, this time period, named after the site of Uruk, is characterized by the emergence of large cities in southern Mesopotamia and the Susiana in southwestern Iran, where large settlements dating to the Uruk period were centered on the sites of Susa and Choga Mish.[11] By the Middle Uruk period (3600–3200 BC), Syria, southern Turkey, and western Iran were covered by a vast network of Uruk colonies, indicating that southern Mesopotamia exercised control over much of this area at least in economic, if not political, terms.[12] Large complexes of public and religious architecture exposed at Uruk leave no doubt that this city had a multitiered society with clearly defined social boundaries and was controlled by a strong political power base and elaborate religious institutions.[13]

Labor organization, taxation, and storage or redistribution of staple and manufactured or traded commodities required bureaucratic specialization and accountability. Large numbers of clay sealings found at Uruk, Susa, and Choga Mish attest to extensive pre-scribal bureaucratic agency within Uruk entities.[14] Unlike the northern sealing tradition of using stamp seals, however, southern Mesopotamians used cylinder seals, consisting of stone cylinders into which seal designs were engraved (Figure 2.4). The difference

between stamp seal and cylinder seal is much more than a technical one and, in fact, tells us about the very nature of scribal agency behind the seal. The limited space on the reverse side of a stamp seal also limited the potential variability in the iconographic repertoire of seal designs. Accordingly, the number of easily discernible variations on a theme is limited. The surface of a cylinder seal, by comparison, provides the "canvas" for a long rectangular image, making it a perfect place to apply an elaborate design with "narrative" depictions. Sufficient room meant that the same theme easily could be varied without confusion or mix-up. This medium, therefore, suited the requirements of an increasingly complex bureaucratic system in which an iconographic theme identified a bureaucratic entity but required subtle details to identify individual administrative agents within its system.

Even for a present-day viewer of an Uruk seal, likely relationships between image and possible functions of its user are not too difficult to decode. A herd of sheep or goats shown in association with a temple might represent the authority of an administrator in charge of a herd belonging to a temple household (Figure 2.4a); a scene showing the production of goods, such as pottery vessels, would have belonged to an official in charge of a manufacturing unit (Figure 2.4b). Symbols and metaphors could also be used: spiders, for example, appear to have represented textile production in large-scale manufactures (Figure 2.4c).

Whereas geometric patterns and animal designs on Neolithic seals appear to identify individuals, families, or tribal affiliations, the agent identified by Uruk seals appears to be an institution-bound official—either one person or multiple persons who shared one office. Seals and sealings from the southern Mesopotamian Uruk culture, therefore, are likely to reflect institutional rather than individual agency.

Although the Uruk culture was dominated by the use of cylinder seals, not all urban developments during the fourth millennium BC adopted them. Urban centers in northern Syria and southeastern Turkey, which developed independently from Uruk (although often were taken over later during Uruk colonial expansion into these areas) continued to use stamp seals, but these were generally larger and more elaborate than those used during the Neolithic period.

FIGURE 2.4. Cylinder seals: (a) temple and two goats feeding off a plant; (b) squatting women(?) manufacturing pottery vessels; (c) series of spiders, possibly symbolizing textile work (a: from Khafaje, Iraq, ca. 3000 BC; b and c: from Tell Agrab, Iraq, ca. 3000 BC). Oriental Institute Museum, photographed by author.

QUANTIFYING ADMINISTRATIVE RESPONSIBILITY: BUREAUCRATIC AGENCY AND SPACE

Although a sizable number of Uruk period door sealings attests to well-defined bureaucratic responsibility within administrative space,

insufficient recordings of find contexts and frequent occurrences in extrusive contexts at Uruk and Susa allow few of them to be related to a functional context. The limited possibilities for spatial analyses on Uruk sites, however, can be offset by data from contemporary urban centers in northern Mesopotamia, which at this time was part of the "Late Chalcolithic" culture. The significance of spatial control within pre-scribal bureaucratic agency, including the limitations of its extent, will be highlighted in two case studies.

Case Study A: Arslantepe

At the site of Arslantepe level VIa (ca. 3100 BC) in southeastern Turkey, more than 2,000 clay sealings were recovered in administrative context (Ferioli and Fiandra 1983; Frangipane 2007; Frangipane and Palmieri 1983). A large corpus was found in situ in a three-room storehouse that was entered from a street on its western side through a central room (A364) (Frangipane 2007, 31–38; figures I.4–6). On its northeastern side it opened toward a second room (A365) that was full of storage vessels. On the opposite side a narrow passageway, too small for humans to pass, opened to another room (A340), which could be entered only through an external doorway from the east—the opposite side of the building from the doorway into central room A364. In addition to a few storage vessels and items used for food preparation (grind stones, cooking pots), this room contained more than 100 mass-produced bowls used for, among other things, food dispersal.

The function of this unit is easily understood. Jars with food provision were passed from A365, the main storage room of this unit, through A364 into A340, where food was not only prepared but also dispersed to recipients waiting outside. In terms of administrative space, therefore, this three-room unit consisted of two sections, one a storage unit (A365 and A364) and the other a kitchen (A340), into which commodities could be transferred from the other rooms but which could not be entered from them. But where were the jars opened? Who took over the administrative responsibility for the content of these containers? The recovery of 175 clay sealings in the eastern corner of kitchen A340 suggests that these expenses were accounted for by agents associated with food production, not storage (Frangipane 2007, 34). Inscribed seal impressions from later palatial or cultic contexts in the Near East indicate that responsibilities within administrative space generally were well defined both spatially and functionally (Reichel 2001, 2002). The evidence from Arslantepe suggests that a similar complexity already existed here in prehistoric times.

The curious concentration of sealings in the corner of kitchen A340 suggests intentional retention, not discard, at this location. Piera Ferioli and Enrica Fiandra (1983), who have conducted extensive functional analyses of the Arslantepe sealings, suggest considering this assemblage a "temporary archive" used to account for the number of containers that had been opened.[15] The significance of this observation will become apparent in the context of numerical accounting systems, to be discussed below.

Case Study B: Hamoukar

Evidence from Hamoukar, a site in northeastern Syria, shows that the level of restrictiveness that was imposed upon an individual bureaucratic agent depended on his function within a system. Recent excavations uncovered two large building complexes that were destroyed by fire around 3500 BC (Reichel 2002, 2009; Figure 2.5a). Although different in details, these complexes resemble each other in their general layout: built around a roughly square courtyard, each of them has a tripartite building (TpB-A and TpB-B in Figure 2.5) built against its northern side. TpB-A, the tripartite building in the eastern complex, could be identified as a storehouse since its smaller internal rooms were full of storage jars and also had door sockets in its doorways, indicating the presence of lockable doors (Figure 2.5a). The recovery of 173 clay sealings from both the ground floor and an upper floor that had fallen down suggests that this building was controlled by an elaborate bureaucratic system. Although several door sealings were retrieved, most of them were container sealings, with basket sealings outnumbering jar sealings by more than ten times. A horizontal pattern analysis and a section view through the three western rooms (Figure 2.5b and c), however, show that the distribution of sealing types follows clearly defined spatial parameters (Reichel 2002). Door and jar sealings were found in ground-floor association, whereas basket sealings were found almost exclusively at the upperfloor level, showing a meaningful functional distinction in the use of space.[16]

But what about the agents who controlled this building? Figure 2.6, which displays the distribution of three distinct seals found on sealings (hereafter seals A, B, and C) in plan and section views, shows that the distribution of seal motifs in this building follows spatially and functionally defined boundaries. Seals A and B were found exclusively on door sealings in ground-floor context and, with one exception, all in one room (134), suggesting limited but spatially well-defined administrative responsibility (Figure 2.6a). The spatial overlap and the recovery of three sealings that had impressions of both seals

are of particular importance when evaluating the nature of agency in this context, because they suggest that they represent two individuals who shared an office, but each one used his own seal. By contrast, seal C, of which 31 impressions were found, only appeared on container sealings. Its spatial distribution, however, was much wider than those of seals A and B (Figure 2.6b). In addition to appearing in upper-floor contexts on the western side (rooms 132, 134, and 135) and the eastern side of the building, it was found at ground-floor level in two of the smaller rooms (132 and 135), and at least one more impression has been found outside this building. Clearly, this seal seems to represent an office associated with a production unit whose realm of interaction was much wider than that of A and B and who in all likelihood was located outside of TpB-B. Items produced at the production unit behind seal C, however, could be placed under lock by administrators' seals, such as A and B.[17]

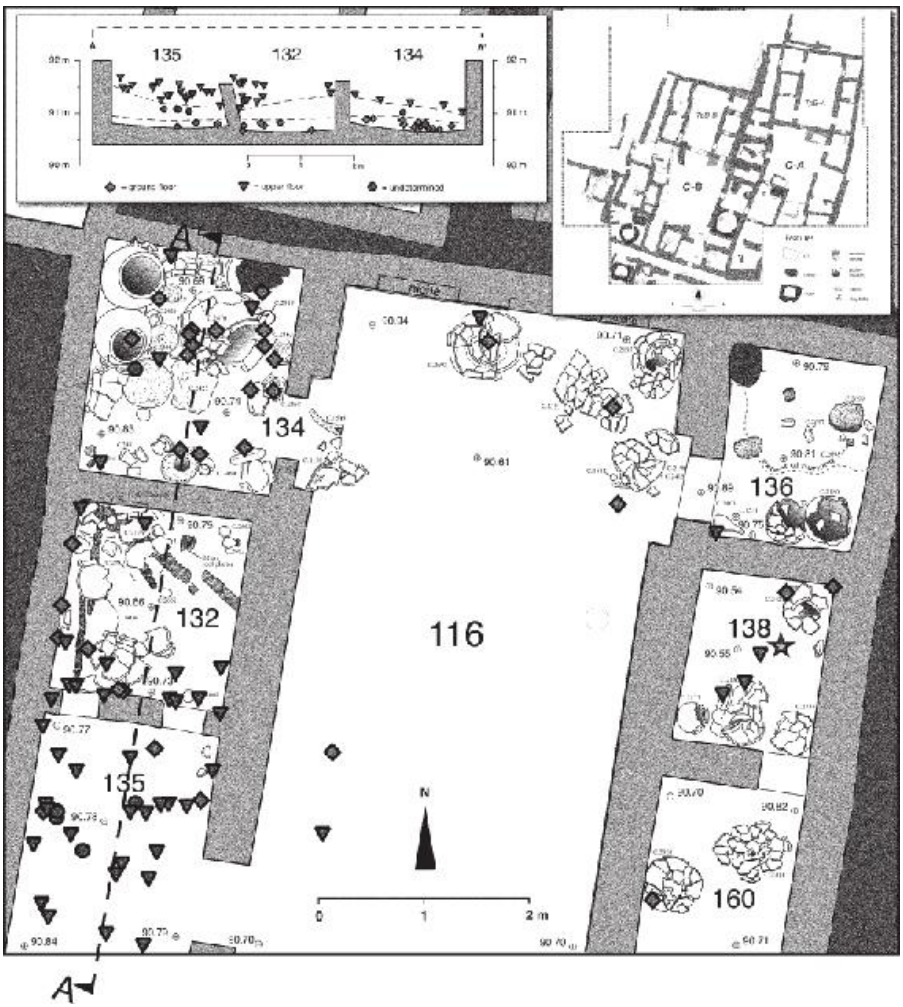


FIGURE 2.5. (a) Plan of administrative complexes at Hamoukar (TpB-A, which is shown as a close-up in b, is shown in dark gray); (b) close-up of tripartite building TpB-A, showing spatial distributions of clay sealings from ground, and upper-floor levels; (c) section view through western rooms, showing vertical distribution of sealings. (Drawn by the author.)

With the emergence of urban entities, therefore, the need to guarantee the integrity of stored or traded commodities became a prime element of bureaucratic control. Earlier individualized seal use on a personal or family level during the Neolithic period gave way to a predominantly institutional use of seals in specialized contexts, highlighted by the emergence of door sealings in the ‘Ubaid and Uruk periods. Agencies behind seal use, accordingly, increasingly became “officialized.”

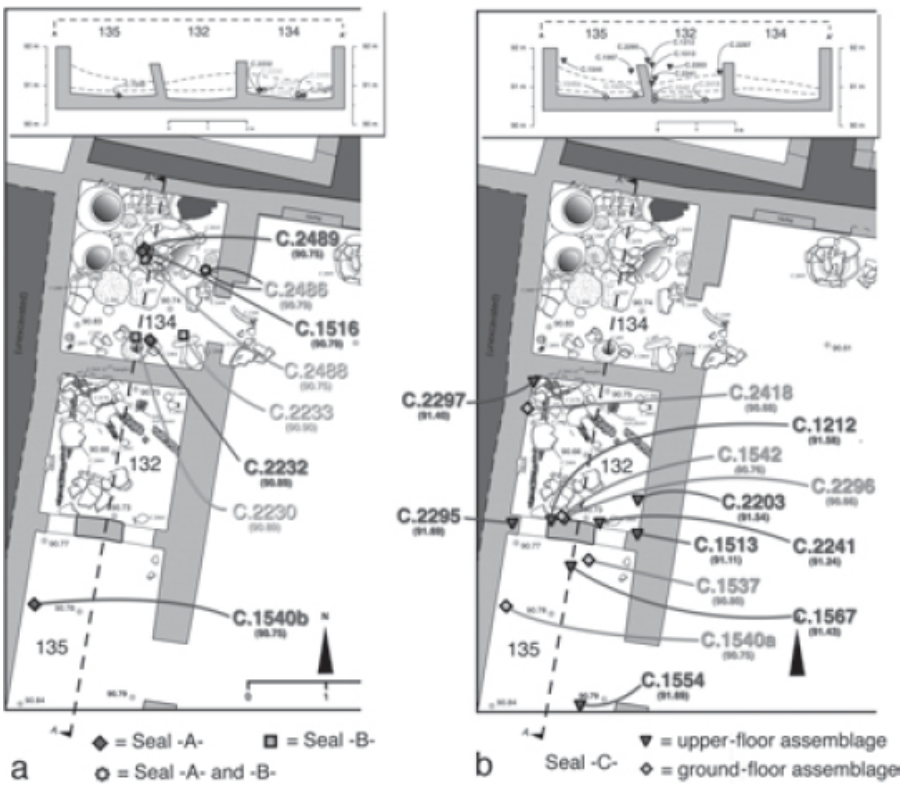


FIGURE 2.6. Close-ups of tripartite building TpB-A (see Figure 2.5), showing spatial distributions of clay sealings with impressions of seals A and B (a) and seal C. (Drawn by the author.)

ACCOUNTING FOR NUMBERS:

MOMENTUM TOWARD SCRIBAL AGENCY

In bureaucratic contexts, sealings allow for the control of bulk and volume but not in numbers. Commodities such as livestock could not be sealed. Moreover, the dispatch of, say, seventeen sealed jars of oil to an institution only guaranteed the integrity of each jar but did not record the total number of jars. The evidence from Arslantepe showed that sealings, once removed from their containers, might have been retained as temporary records of expenditure; hence, they were implicitly turned into counters. This idea might not be so far-fetched. Counters, small items made of stone or clay of figurative or geometric shape, indeed were used in the ancient Near East from the Neolithic period onward (Figure 2.7). A relatively wide array of shapes makes it difficult to identify an overall unifying characteristic for them, aside from the fact that they often tend to be found as assemblages. In the past four decades the study of the counters has become intrinsically connected with the name of Denise Schmandt-Besserat, who has published widely on this topic and whose definition, with some reservations, is accepted here for the purpose of this study (Schmandt-Besserat 1992, 1994, 1996, 2007).[18] By referring to them as "tokens," Schmandt-Besserat saw them not only as counters but also as "placeholders" for specific objects to be counted and accounted for.

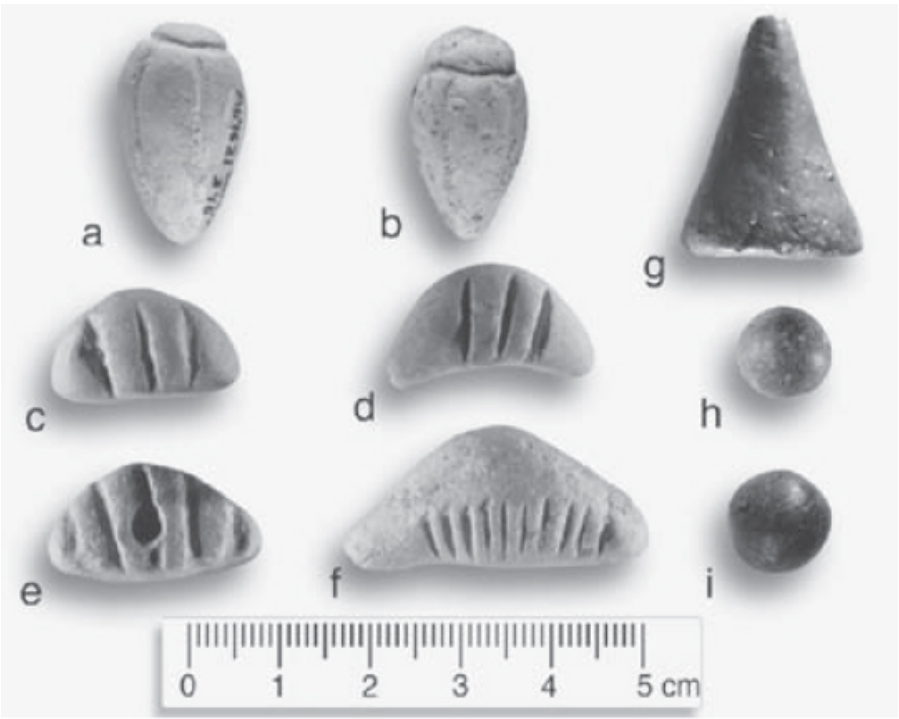


FIGURE 2.7. Selection of tokens from Choga Mish (a–f) and Hamoukar (g–i) (a–f: ca. 3500–3200 BC, Oriental Institute Museum, University of Chicago; g–i: ca. 3500 BC; Deir ez-Zor Museum, Syria), a–f: photographed by the author with permission; g–i: photographed by the author.

Our understanding of the precise role of these tokens in business procedures remains as limited as the identity and nature of the agents who operated them. We have to assume that they represented commodities that were handed over and/or stored away. We do not know, however, what happened to these tokens after accounting was completed. In most cases, they probably were just used for counting. By the Middle to Late Uruk period (3500–3300 BC), however, some of them became part of the transaction record. Excavations at several Uruk sites uncovered clay balls of 5–10 centimeters in diameter whose surfaces were covered with cylinder-seal impressions (Figure 2.8a).[19] The recovery of numerous broken specimens (Figure 2.8b) confirmed that they contained tokens. These balls provided an answer to the question of how to safely store numbers. The proper number of tokens was wrapped in clay, rolled into a sphere, and then sealed (Schmandt-Besserat 1992, 110–28). Once the clay had dried, any alteration of the number inside would have been impossible without breaking the clay ball, creating a secure "envelope" for its content.

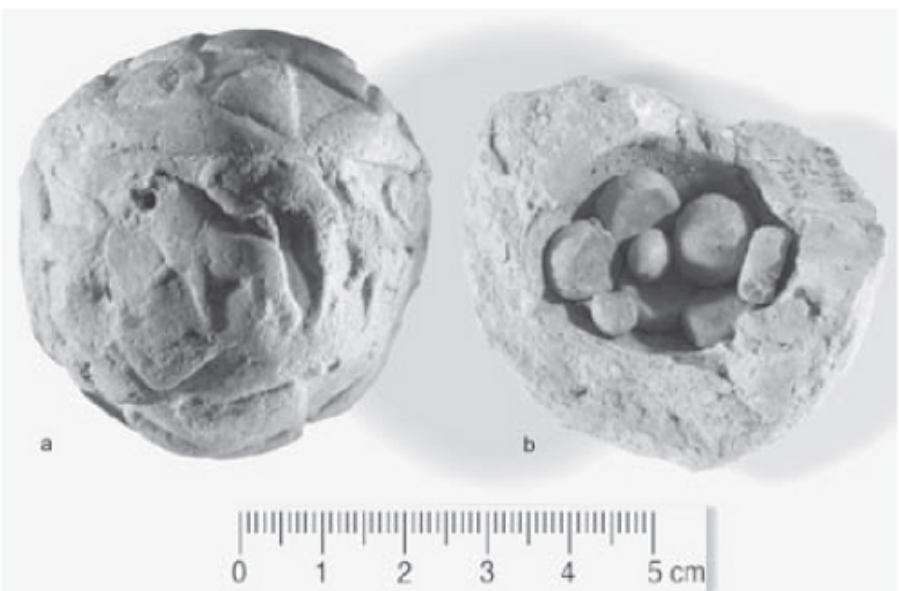


FIGURE 2.8. (a) Sealed clay ball with tokens inside; (b) broken clay ball, showing tokens inside (from Choga Mish, ca. 3200 BC, Oriental Institute Museum). Photographed by the author.

The precise functional context of these balls remains uncertain. One

possibility could be that they were a receipt for items that were turned over for storage in an administrative unit. If so, the seal on the clay ball would reflect the authority of the storage unit's administrator, and the ball would likely be broken when the items were retrieved.

What is of great interest is the geographical distribution of these clay balls. They were found only at sites within southern Mesopotamia (Uruk), at sites in the Susiana and in Syria that were part of the Uruk system (Susa, Choga Mish, Habuba Kabira), and at sites that otherwise show contact with the Uruk culture during the later fourth millennium BC (e.g., Tepe Yahia in the central Iranian highlands).[20] The fact that only Uruk-style cylinders seals with an "institutional" repertoire similar to those found on clay sealings show up on these clay balls supports the notion that this is an Uruk-specific bureaucratic tool. We should be cautious, however, when evaluating the overall significance of these balls, especially their absence in northern Mesopotamia, where the use of seals, sealings, and tokens had the same long history as in southern Mesopotamia. Any assumption that tracking numbers was "somehow less important" to bureaucrats in a non-Uruk context would be misleading. Even on Uruk sites the relatively moderate number of recovered clay balls suggests that this "recording technique" never enjoyed the same widespread use as seals and sealings. On the other hand, their uniformity, combined with their occurrence on several Uruk sites that are quite distant from each other, strongly suggests that they were used by an organization that had an extensive bureaucratic network and whose recording technique, if not "experimental," was at the forefront of technology, quite possibly the state itself.

FROM NUMBERS TO WRITING

Recording numbers through tokens in clay balls not only was laborious and cumbersome but also had obvious logistical shortcomings: once securely stored, the number itself became invisible from outside. The verification of the number of tokens inside required the destruction of the actual storage device (i.e., the clay ball). These clay balls might have been suitable as storage receipts, but for recording numbers alternatives had to be sought. Some tokens (e.g., Figure 2.7e) were perforated, indicating that they could have been strung up. Once tied together, the string's knot could be wrapped in clay and sealed, which kept the number of strung-up tokens safe from alterations. Several oblong to biconical sealed clay lumps with string holes found at Susa, Choga Mish, Habuba Kabira, and Tell Brak fit this pattern (Schmandt-Besserat 1992, 108–10, figures 53, 54). It was in

connection to clay balls, however, that a more practical approach appeared, signaling the impending advance of a "true" writing system: numerous clay balls were found with a number of markings on the outside that corresponded to the number of tokens inside (Figure 2.9).

Although these add-ons, which are found only on a limited number of surviving clay balls, were "secondary" notations—the primary "legally binding" number still constituted by the tokens inside—their addition had consequences that extended far beyond anything that the inventor of this system could have imagined. These incisions de facto constitute a first writing system. These secondary recordings soon turned primary when similar notations were made on round slabs of clay (Figure 2.10a). Just like clay balls, these slabs were sealed to verify the accuracy of an account (Figure 2.10b). In the context of scribal agency, the fact that these proto-tablets were sealed *before* they were inscribed, with signs often cutting into seal impressions, is of significance. The types of seals found on them are of the same "institutional" type as those found on clay balls and sealings from the Uruk context, thus identifying these tablets as office "stationery" for office-bound transactions.

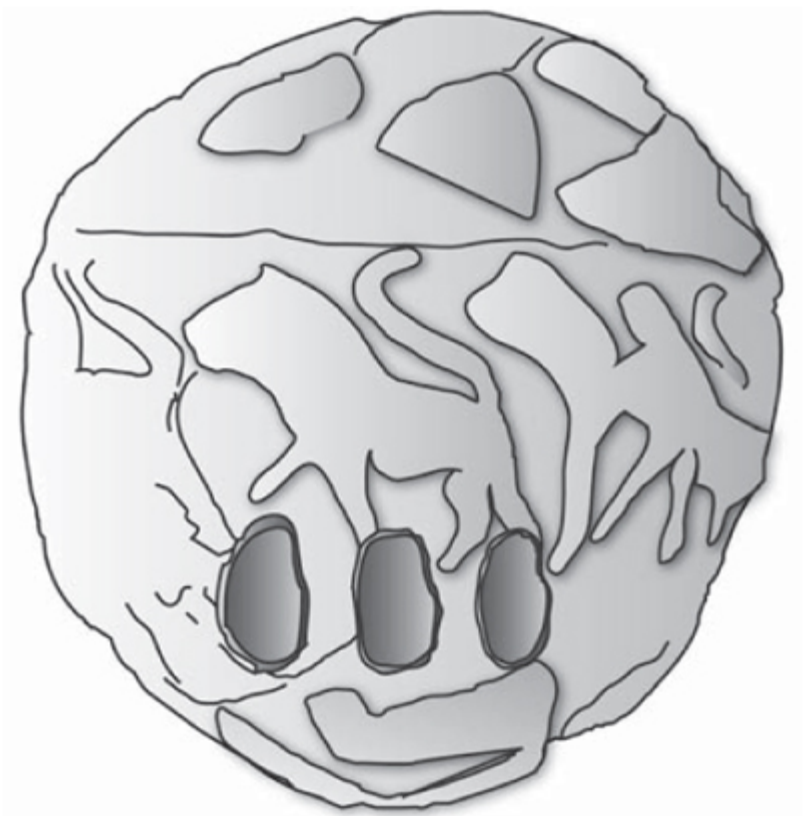


FIGURE 2.9. Schematic rendering of a sealed clay ball with numerical

notation (drawing by author, based on the Choga Mish bulla shown in Figure 2.8).

Recording numbers on clay slabs as opposed to counting tokens must have changed bureaucratic procedures considerably. More to the point of this study, these technological innovations resulted in the transition of the recording agent from a pre-scribal accountant to a scribe. Over the next two to three centuries, the rise in scribal activity was meteoric. As shown by the large number of surviving texts dating to Uruk IV, the latest phase of the Uruk period (3100–3000 BC), scribal agency had become one of the pillars of society that guaranteed economic maximization and stability (Englund 1994; Englund and Nissen 2001, 2005).

Over the years, the writing system evolved. Numerals were expressed with different signs—small round, large round, and wedge- or cone-shaped impressions—which started to appear on numerical tablets, expressing a numerical hierarchy.[21] The greatest advance in this new recording technique, however, was constituted by the development of non-numerical signs that could identify commodities and, subsequently, also people (see, e.g., Nissen 1986, 1993, 19–24). Images of full or partial renderings of items initially were incised with a pointed tool next to the lists of numerals. Later texts from Uruk level III (ca. 3000–2900 BC) show that the incising of signs, which was a laborious undertaking, gradually gave way to a more simplified form of writing, in which wedges were impressed into the clay with a stylus, creating more abstracted versions of previously incised images.[22] This step led to further simplifications of the signs, ultimately resulting in a wedge-shaped “cuneiform” writing system. Although many of these early texts are not fully readable, there is little doubt that the underlying language upon which this writing system is based was Sumerian, because many Uruk IV and III signs are pictorial forerunners to later Sumerian signs.

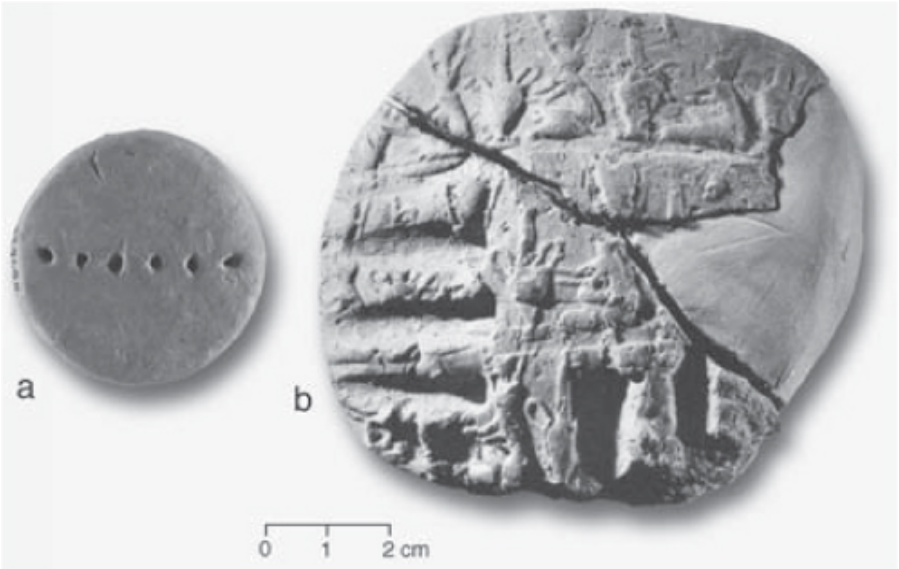


FIGURE 2.10. Choga Mish tablets: (a) circular tablet with five impressions, showing simple numerical notation, ca. 3100 BC (Oriental Institute Museum, photographed by author with permission); (b) numerical tablet marked with 5(+?) wedge-shaped markers, sealed with cylinder-seal impression showing women making pottery jars, ca. 3100 BC (Oriental Institute Museum, image reproduced with permission).

MESOPOTAMIAN WRITING: AN INTELLIGENTLY DESIGNED SYSTEM?

In this volume, Adam Smith questions the emergence of "intelligently designed" writing systems, suggesting that much of the establishment of signs in the early Chinese script was based on the repeated use of certain symbols. Much of my contribution might echo Smith's suggestions, and I do concur with him to a certain degree, even if our materials and approaches differ substantially. Mesopotamia's writing system was not the outcome of a centralized plan; its development, as shown in the foregoing discussion, was to a large degree "accidental." Its developmental history extended over millennia, originating in the use of seals and sealings by individuals or families in village-based economies during Neolithic times. The subsequent rise of urban complexity during the Uruk period also affected the type of agents that are found in prescribal bureaucracies, when the individualized use of seals was juxtaposed by an increasingly "institutionalized" use, with seals now tied to offices instead of individual persons. Although a "true" writing system only emerged during the Uruk period with its

highly organized state society and elaborate bureaucratic apparatus, its invention was brought about not by the decision of an individual elite or political figure but by the actions of anonymous bureaucrats. Most importantly, the mechanics of how to record and control administrative data were present for millennia before writing on a slab of clay first appeared. Mesopotamia's writing system, therefore, represented a *technological,* not a *conceptual,* innovation.

We cannot entirely discard the notion of "intelligent" design within Mesopotamia's writing system. The emergence of royal inscriptions during the midthird millennium BC furthered the development of syntactical structures and verb forms, as well as suffixes and infixes for declination and conjugation, to allow the record of narratives. The introduction of Akkadian, a Semitic language, as the language of royal inscriptions during the Akkadian Dynasty (2350–2200 BC) required a standardization of cuneiform signs and the establishment of syllabic readings for signs that so far had logographic values based on the Sumerian language (Edzard 1995). Similar state-ordered standardizations in the writing system occurred under King Shulgi of the Ur III Dynasty (2094–2048 BC; Steinkeller 1987, 21).

There is no doubt that throughout Mesopotamia's history rulers used and influenced scribal agency to propagate their ideologies in writing, but such motivations were still absent when writing came about. Uruk's rulers certainly did not avoid using propaganda, but they used architecture and imagery rather than written materials. Uruk's political elite indirectly may have fostered the emergence of the writing systems in its administrative or bureaucratic entities, but not for the purpose of political propagation.

MESOPOTAMIAN WRITING: AN "INEVITABLE" DEVELOPMENT?

In my introduction I highlighted the impact that southern Mesopotamia's environmental and geopolitical determinants might have had on the development of a complex, and ultimately bureaucratic, society. If Mesopotamia's writing system was not an "intelligent" design, was its emergence inevitable?

I am aware that an environmental-adaptivist viewpoint may be unpopular in a volume on agency, because it de-emphasizes the impact of individual decision making, but it is fallacious to disregard this view entirely in this discussion. Environmental factors alone did not bring about writing, but they could have evoked human responses that opened a trajectory toward the development of a writing system.

Let us remember that, although seals, sealings, and tokens were known in most parts of the Near East, the development of clay-ball "envelopes" for tokens and numerical tablets occurred only on Uruk and Uruk-affiliated sites, the same area in which "true" writing later emerged. Northern Mesopotamia's Late Chalcolithic urban culture, although technologically and administratively at par with the Uruk culture, did not develop a similar writing system. What sets southern Mesopotamia apart from the surrounding area is its landscape with its unique potentials (a low cost of transporting bulk on rivers and canals across long distances) as well as constraints (diminishing rainfalls over time, resulting in an increasing dependence on river water for irrigation agriculture). The need for large-scale socioeconomic organization, accordingly, was significantly higher in this area than in northern Mesopotamia, highlighting an inherent need for an elaborate administrative recording system.

In this setting, the emergence of a complex bureaucracy in this area may almost seem somewhat inevitable. As the foregoing discussion has shown, however, it is overly simplistic to see the emergence of writing as an adaptive response to an environmental challenge. The long trajectory from container and door sealings, tokens, and sealed clay balls to numerical and pictographic tablets precludes the emergence of writing in Mesopotamia as an "intelligent" design. But the trajectory is uneven—thousands of years dominated by the use of container sealings and tokens were followed by few centuries during which sealed clay balls and numerical and later pictographic tablets were developed in rapid sequence as administrative recording tools. The origins of Mesopotamia's writing system clearly lie within its bureaucratic needs, and it is misleading to de-emphasize the role of the scribe as a key agent of social and economic change in the formation of the urban, literate Mesopotamian society that dominated the ancient Near Eastern world for several millennia.

NOTES

1. On evidence for written documents from Egypt dating to Dynasty 0, found at Umm el-Qaab (Abydos, Upper Egypt) and dating to ca. 3300 BC, see Dreyer (1998). Recent news stories trying to date the invention of the Harappan writing system in the Indus Valley as early as 3500 BC have been widely discredited (http://news.bbc.co.uk/2/hi/science/nature/334517.stm).

2. See, for example, Karl Wittfogel's model of a hydraulic society (Wittfogel 1957), discussed below.

3. For a comprehensive description of the formative processes that

generated the modern-day southern Mesopotamian landscape, see Adams (1981, 1–26).

4. This estimate was published by Finkbeiner (1991, 194), following his 1982–1984 intensive site survey.

5. For a description of northern Mesopotamia's geography, see Oates (1968, 1–16); for a summary account of its early occupational history, see Watkins (1992).

6. The time periods correspond to the so-called Hassuna, Samarra, and Halaf periods in the north and the early 'Ubaid period in the south. Cultural periods and corresponding dates given here follow Hansen (1992) for southern Mesopotamia and Akkermans and Schwartz (2003) for northern Mesopotamia and Syria. See Akkermans and Schwartz (2003, especially chapter 4) for a summary of this period in Syria.

7. Unless indicated otherwise, my account of seals and sealings from the Halaf period is based on Akkermans and Schwartz (2003, 139–41, figures 4.23–4.25).

8. The relatively wide intra-site distribution of seals dating to the Halaf period supports this notion. Among 300 sealings found at Sabi Abyad, for example—the largest assemblage of sealings recovered so far on any Halaf site—70 distinct seal motifs could be identified, which does not suggest the presence of tightly controlled specialized administration behind these sealings (Duistermaat 1996). These sealings were found in smaller hamlets, as well as larger settlements, suggesting a wide, non-exclusive use of seals (Akkermans and Schwartz 2003, 140). An individualized or family-based ownership of seals is also supported by the seal motifs, which mostly consist of single animals and animal groups, often in the context of hunts. Human representations remain rare and often occur in "Master of Animal" groups. Given the relatively small space in which it was to be deployed, the iconographic repertoire allowed for limited discernible recombinations, which would be suitable for family or tribal markers.

9. See Sabi Abyad in the Balikh Valley (Akkermans and Schwartz 2003, 113, figure 4.7; 114, figure 4.8) and Tell Bouqras on the Middle Euphrates (Akkermans and Schwartz 2003, 123, figure 4.14) for examples within Syria. Although little is known from southern Mesopotamia in this period, granaries of the grid type were found at the "'Ubaid 0" settlement of Tell el-'Oueili (Huot 1992), dated to the second half of the seventh millennium BC based on C-14 dates (Valladas, Evin, and Arnold 1996).

10. For the distribution pattern of the Degirmentepe sealings see Helwing (2003), 73 and Figures 2.3a and b.

11. For the purpose of this study I have treated the southern Mesopotamian Uruk sites and the Susiana as a cultural entity, based on the material assemblages (notably, pottery and glyptics) from the Middle Uruk period onward, which strongly suggest that its key settlements by that time were controlled by the Uruk culture (Algaze 1993, 11–18). It should be pointed out, however, that the level of control exercised by Uruk over this area and the Susiana remains discussed, and some scholars (e.g., Amiet [1966], whom I have used extensively for this discussion) have treated the evidence for scribal traditions in the Susiana separately from those at Uruk.

12. A comprehensive discussion of the Uruk colonial phenomenon is beyond the scope and purpose of this chapter. For an overview, see discussions by Algaze (1993) and Stein (1994) and contributions in Rothman (2001).

13. Clearly defined social hierarchies are indicated in Uruk artwork, most famously on the "Warka Vase," which shows a relief band with naked human laborers below and clearly separated from a higher band that shows the city's ruler as the provider of the temple of the city goddess (Strommenger 1964, figures 19–22).

14. Seal impressions from Uruk dating to the Uruk period are published in Boehmer 1999. For the fourth-millennium BC seal impressions from Susa, see Amiet (1972, 66– 108; nos. 463–704); for Choga Mish, see Delougaz, Kantor, and Alizadeh (1996, 135–48, plates 135–58).

15. "When the sealing is taken off it loses its function of closing guarantee, but it keeps the record; so it becomes a document of proof of the accomplished control of guarantee between an operation and the other, and it bears witness that a change in the quantity took place after an operation that was correct in the procedure" (Ferioli and Fiandra 1983, 460).

16. Because of the rapid decay of collapsed mud-brick architecture close to the surface, evidence for upper stories often is inconclusive. In TpB-A, however, the recovery of numerous pieces of roof plaster just below topsoil in the area of the two southwestern-most rooms of TpB-A indicates that at least this part of the building carried an upper story.

17. The access route to the upper story could not be clarified conclusively. No staircase was found, and it is possible that ladders were used. It is, therefore, impossible to say with certainty which administrators' seals could lock items sealed by seal C.

18. It should be noted that Schmandt-Besserat's work has garnered praise as well as severe criticism. See Zimanksy (1993) for a

particularly harsh assessment of Schmandt-Besserat (1992) and see Powell (1994) for a slightly more positive review. Taking all viewpoints into account, I agree that although some of Schmandt-Besserat's conclusions should be treated with caution, her principal ideas are sound and credible.

19. Unfortunately, most of the excavated contexts at Uruk, Susa, and Choga Mish that contained clay envelopes are notoriously difficult to date with precision. The example from Habuba Kabira, whose relatively short occupation can be related to Uruk levels VI and V based on parallels in pottery assemblages, appears to be the earliest known example.

20. See Amiet (1972, plates 68–72) for Susa; Delougaz, Kantor, and Alizadeh (1996, plates 34–39) for Choga Mish; and Strommenger (1980, figure 58) for Habuba Kabira. Single hollow clay balls also were found or acquired at Dharan (Saudi Arabia) and Shahdad (eastern Iran), but little if anything is known about their context. A clay ball said to have been bought at Dumah (Israel) most likely is unrelated to its acquisition context (Schmandt-Besserat 1992, 114–16, figure 61).

21. These signs show a striking similarity to Mesopotamia's later numerical notations, possibly, although not inevitably, representing both decimal and hexagesimal accounting systems. See Nissen (1993, 125–51) for examples of such tablets and a reconstruction of the accounting systems found in Uruk IV and III tablets.

22. The assignment of the Uruk IV and III tablets to their respective levels is by far less certain than often assumed. As Nissen notes, none of the Uruk IV and III tablets "had been found in primary, undisturbed context, but either in unmistakable layers of rubbish or in deposits of which the dating was uncertain. Falkenstein [the field epigrapher] and the excavators had dated these tablets by attributing them to (building) levels III and IV. From both Falkenstein's publication and the various preliminary excavation reports, however, these attributions proved difficult to check against the original site records, and thus uneasy feelings arose as to the validity of such ascriptions" (Nissen 1986, 318f).

THREE

Are Writing Systems Intelligently Designed?

Adam D. Smith

> These English psychologists—what is it they want? We find them, voluntarily or involuntarily, ever engaged in the same work—the work of pushing into the foreground the *partie honteuse* of our inner world and of seeking for the really operative, really imperative and decisive factor in history just there, where the intellectual pride of man would least wish to find it (for example, in the *vis inertiae* of custom or in forgetfulness or in some blind and accidental hooking-together and mechanism of ideas or in something purely-passive, automatic, reflex-motion-like, molecular and thoroughly stupid).
>
> **—FRIEDRICH NIETZSCHE, *ON THE GENEALOGY OF MORALS***

> The flow of action continually produces consequences which are unintended by actors, and these unintended consequences also may form unacknowledged conditions of action in a feedback fashion. Human history is created by intentional activities but is not an intended project.
>
> **—GIDDENS (1984, 27)**

This chapter concerns the genealogy of writing systems, not of morals. But, like Nietzsche's "English psychologists," I am interested in the role of "blind and accidental hooking-together and mechanism" in the formation of that genealogy, particularly to the extent that its results resemble the products of goal-directed human agency. I will argue that the apparent design and efficacious functionality of writing systems are the products of less human agency and forethought than is generally imagined.

STRUCTURATION

Much of my argument aligns very neatly with the key themes of Giddens's (1984, 16–28) account of "structure" and "structuration,"

which is one of the most frequently invoked sources in the archaeological discussion of agency (for a refreshingly clear critique of that discussion, see Nakassis, this volume). I will use those points of alignment with Giddens to anchor my presentation to that ongoing discussion. Unless otherwise specified, all quoted material in this section is from Giddens (1984, 19–25).

A writing system, and a literate tradition more generally, is a set of "rules and resources drawn upon in the production … of social action," specifically the social action of written communication and its strategic deployment. Knowledge of literacy is typically "practical rather than theoretical in character." We may be able to formulate rules of spelling, syntax, or style, but for the most part we just get on with it. In any case "such knowledge does not specify all the situations which an actor might meet with," but instead "provides for the generalized capacity to respond to and influence an indeterminate range of social circumstances."

Most importantly, we acquire literacy by being exposed to examples of it. Letter forms, words, sentences, stories, children's literature, and the documents that fill our adult lives all shape our expectations about how the written word could or should appear. By producing documents of our own, we contribute, however marginally, to the pool of exemplars on the basis of which others may intuit new "rules and resources" or modify old ones. In Giddens's terms, "the rules and resources drawn upon in the production and reproduction of social action are at the same time the means of system reproduction (the duality of structure)." Writing systems have "structuring properties" that allow us to discern millennia-long developmental histories. Of course, how our written productions will be deliberately or unwittingly inherited as resources by others is substantially beyond our control. There is nothing to "prevent the structured properties of social systems from stretching away, in time and in space, beyond the control of any individual actors." Traditions of literacy evolve.

There is, then, a ready accommodation between aspects of the history of literacy and writing systems and the terminology of Giddens's "structuration." Nevertheless, I have a number of reservations about Giddens's account that I will try to briefly elucidate. First, he defines "agent" in terms of the capacity "to act otherwise," a formulation shared with the philosophical literature on "free will" and problematic for reasons given by Dennett (1984). I maintain that agents are more comprehensible, and more readily contrasted with the mechanisms of what Giddens calls "structuration," by adopting Dennett's (1989, 2009; Elton 2003, 32–33) equation of agents with "intentional systems," systems whose behavior is

interpretable through the attribution of beliefs and goals. The central theme of this chapter is that the evolution of writing systems makes sense in terms of the operation of a mechanism like Giddens's "structuration," but contrasted not with an "ability to have done otherwise" but with the foresightful goal of an individual or group.

Second, Giddens seems to underestimate the potential for things other than human minds and bodies to be bearers of "structure" and our ability to recover "structure" from them. In a rather awkwardly phrased passage he states: "[S]tructure exists, as time-space presence, only in its instantiations in [reproduced social] practices and as memory traces orienting the conduct of knowledgeable human agents," that is, structure exists only in behavior and minds. (A still more restrictive version of this claim—minds only—appears in Giddens 1984, 26.) Unless there is more to the obscure qualification "as time-space presence" than meets the eye, this is straightforwardly contradicted by our ability to recover (partially, fallibly) the "rules and resources" of ancient scribal activity, and human behavior more generally, long after all behavior and brains have vanished. It is also contradicted by the observation that we acquire the "structure" of literacy to a great extent by reading texts, and not by observing the motor performances of their authors (and still less by tapping into their "memory traces").

This point leads to the third and final concern about Giddens's "structuration" (and about its reception within archaeological discourse). It is more or less clear how the notion of "structure" is supposed to help the analyst, but the causal mechanisms (physical, biological, psychological) by which it is supposed to play the role envisaged for it are largely mysterious. A further aim of this chapter is to show how recent progress in the cognitive neuroscience of reading can inform a historical account of the emergence of literacy and provide a causally explicit sketch of the "structure" involved in that process of emergence.

I approach the question of the origins of writing from the perspective of my primary area of interest, that of the early history of literacy and literate institutions in East Asia. Consequently, I will primarily discuss evidence from early China. However, the claims that I want to make are intended to be general ones about the nature of emergent writing systems cross-culturally.

THE ORIGIN OF WRITING AS AN ACT OF CREATION?

The question of the origins of pristine scripts—those that appeared without borrowing from already literate neighboring populations—is a difficult one for several reasons. Because the transition to literacy typically takes place among a very restricted subpopulation, only subsequently becoming more widespread, the earliest phases of script development are consistently the least well attested. The fact that the process of emergence seems to be relatively swift, taking place over a small number of generations or perhaps in a single generation, compounds the problem of attestation. We typically lack direct evidence for crucial transitional stages. It is generally acknowledged, for instance, that the earliest attested writing from late second-millennium China is likely to have been immediately preceded by some kind of developmental precursor (Bagley 2004; Qiu Xigui 2000, 42–43). Direct evidence for it is frustratingly slight, however, and, for the time being, confined to a handful of brush-written signs—uninterpretable but formally related to later sign forms—on ceramic vessels from the mid-second millennium (Song Guoding 2003).

The emergence of literacy is also unconstrained by any specific technological or environmental prerequisites, the history of which might help us understand why pristine writing systems appeared when and where they did. There is no obvious technological barrier to the development of literacy in the many societies in which writing systems did not emerge. It does not require high temperatures, the extraction and processing of a specific raw material, high-speed rotary motion, or complex tools. Indeed, its material prerequisites had long previously been fully explored in support of the human enthusiasm for pictorial representation and varieties of nonliterate sign-use.

The relative swiftness of the transition to literacy, and its independence from technological or material constraints, have invited interpretations of the process that are distinctively articulated in terms of human agency and conscious foresight. Wang (2007, 363), for instance, refers to the "individual genius . . . involved in [writing's] invention" and goes on to provide a sketch of a conscious, deliberate process (Wang 2007, 375–76). Boltz (1994, 38–39) states that "writing is an invention . . . the result of a momentary occurrence. In this case, the moment was when someone realized that a graph or sign could stand for a . . . meaningful unit of language." Houston (2004a, 235) refers to a "moment of revelatory creation." Powell (1981, 422) insists that cuneiform was invented by an individual.

The first scribes are often portrayed as tailoring their nascent scripts to the "needs of society" as they perceived them. Gong Yushu (2006, 85) states that "social needs are the fundamental reason why [writing] is brought into being." Wang's (2007, iii) central aim is to

consider writing from the perspective of "how the ideological and administrative needs of the early state were met." Cooper (2004, 78) suggests that writing in China was "sparked by the organizational needs of a growing Shang polity." The implication in each case is that writing was invented by a first generation of scribes who were clear about their goals and designed writing systems to achieve them.

I will refer to the approaches just characterized as the "intelligent design" approach to the origin of literacy. The aim of this chapter is not simply to overthrow that understanding of script emergence but rather to provide an alternative, perhaps partially parallel or complementary, account of the same events and processes that minimizes the role of foresightful human agency and assigns a greater explanatory role to what might be called "structure" in Giddens's sense. There are, I suggest, several advantages to this alternative account. First, it provides a way around the methodological inaccessibility of an "individual genius" or "a moment of revelatory creation" in the archaeological or historical record, focusing instead on more tractable archaeological variables such as the intensified production of sign-bearing objects and the formation of communities of increasingly full-time specialists. Second, it accounts for several patterns of developmental change that characterize the early history of scripts that would be puzzling from the point of view of the "intelligent design" model.

AN ALTERNATIVE HYPOTHESIS: BEGOTTEN, NOT CREATED

The proposal presented in this chapter is that literacy emerges from precursor systems of nonliterate sign-use that rely on more general and universal cognitive capacities for object recognition and naming. The transition is set in motion when a precursor system of sign-use is subject to repetitive intensification by an interacting community of specialist users, typically as part of more general trends toward intensification of production and full-time specialization in complex societies. Intensification in the use of a repertoire of precursor signs has two consequences. The first is its effect on sign-users: it serves to train a more "word-like" and less "object-like" recognition of individual signs. Second, it greatly increases the population of sign exemplars and allows cumulative selectionist processes to operate on variation among those exemplars: variants that better support the visual recognition, memory, and rapid lexical access required by nascent literacy replicate at the expense of those that do so less well. As a consequence, literate capacities of sign-users co-evolve with the

sign repertoire: as the performances of sign-users incrementally approximate full-fledged literacy, the system of signs that they use sheds its original object-like visual properties and takes on increasingly word-like characteristics. Signs change so that they stimulate their readers' lexicons with less processing and less conscious attention, and readers' visual pathways change to accelerate the passage from retina to lexicon. I claim that this happens by a fundamentally "blind" process of selection. This transition, in which the performance of sign-users increasingly resembles full-fledged literacy and the repertoire of signs gradually sheds its initial object-like traits, is still in progress during the earliest attested stages of several writing systems, including Chinese. By combining this evidence with examples of systems of nonliterate sign-use, which rely on more general capacities for object recognition, we can get a good understanding of the nature of the transition, notwithstanding the generally poor attestation, alluded to above, of the hypothetical earliest stages of the major script families.

The hypothesized selectionist process is largely independent of any foresightful design goals on the part of individual users, and its long-term trends were probably largely opaque to them. It is only clearly visible by integrating the insights into patterns of long-term script change provided by palaeographic studies with perspectives derived from recent work on the cognitive neuroscience of reading. It is, nevertheless, the process responsible for granting visual signs the functional properties that allow us to characterize them as writing—namely, the ability to stimulate automated, highly specific, serial access to the lexicon, rapid enough to serve as linguistic input to the language areas of the brain in a manner comparable to more ancient aural pathways.

VISUAL OBJECTS VS. VISUAL WORDS

Much of the psychology and neuroscience of visual perception have used experimental scenarios that involve the visual presentation of words or pictures of things to human subjects for varying periods of time, with or without distractors or "primes" of various kinds, and measuring the effects of these variables on various tasks. Such tasks might include naming words or objects or categorizing them semantically. Recent rapid growth in brain-imaging techniques has allowed the cognitive models of how these tasks are performed to be more closely related to the cortical regions that are most active during their performance. (Dehaene and colleagues [2005] provide an accessible point of entry to this substantial literature.)

In some behavioral respects, subjects' response to visual (i.e., written) words and visual objects can be very similar: reading aloud a sequence of concrete nouns and naming a sequence of images of their corresponding objects result in very similar oral performances. Indeed, there is good evidence that visual objects in an attended area of the visual field activate corresponding phonological representations without the subject naming them aloud, even when the subject is instructed to ignore them and to perform some other linguistic task (Morsella and Miozzo 2002; Navarette and Costa 2005).

According to the hypothesis presented here, this ability of visual objects to automatically stimulate linguistic representations is the "preadaptation" that supports the emergence of literacy. It also provides the first suggestion that there is a continuum from visual objects to visual words, which is not marked by any sudden jump in the linguistic properties of the visual stimulus.[1]

There are, however, important differences. For one thing, visual word recognition and naming (reading aloud) rely on a competence that is only about 5,000 years old, and in most human populations a lot less than that, whereas visual object recognition and naming have been around since humans acquired language. There are also a number of subtle but important behavioral asymmetries between visual object naming and the naming of visual words. One of the most informative for our purposes is the so-called Stroop effect (see MacLeod 1991 for an extensive review, on which the following summary is based).

The Stroop effect, in its most generalized form, refers to the fact that the task of naming visual words is essentially immune to the distracting effect of incongruent objects in the visual field, whereas the naming of objects is more subject to interference from incongruent visual words. The naming of an object may be inhibited (slowed) by the presence of a superimposed distractor word, but reading a word aloud is largely immune to distraction by objects. Word distractors that belong to the same semantic category ("e.g., the word *ankle* on a picture of a hand"; MacLeod 1991, 167) distract the most. If the word is the same as the name of the object, it facilitates (speeds up) the naming of the object.

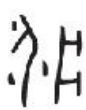
In a remarkable reversal of this pattern, "if a word is to be categorized [rather than named], then a picture of an object from another category causes a strong inhibition, whereas a word has no such effect on picture categorizing" (Glaser and Glaser 1989, 14). This shows that the Stroop effect is not the result of anything as simple as the relative visual salience of words vis-à-vis objects. Rather, the asymmetry in naming words and objects suggests that visual words

activate their corresponding lexical item (or its phonological form) in a more efficient, more automatic, and less ignorable way than objects do. In some sense, the visual word follows a more streamlined, less easily disrupted path to phonology than the visual object. The question is why.

Several relevant factors have been proposed. Work has shown that Stroop-like asymmetries can be modified or reversed through repetitive training (Cohen, Dunbar, and McClelland 1990; MacLeod 1991, 181–82). This suggests that a visual entity may become cognitively less object-like and more word-like (vis-à-vis the Stroop effect) simply through association with its name in a repetitive task. Cohen and colleagues also suggested that word reading is a more "consistently mapped task ... A particular sequence of letters is almost invariably associated with the word they represent." Visual objects, however, potentially have associations with a greater diversity of lexical items. In other words, a visual entity is more word-like if readers have been trained to associate it with a single lexical item, and more object-like if it has complex, context-dependent associations with multiple lexical items.

These proposals are directly relevant to the hypothesis presented here. Intensification in the use of a set of object-like visual signs leads to habituating repetition, whereas the context of their routine use channels an association with a consistent referent. Visual objects that are members of the sign system become more word-like, from the point of view of the Stroop effect, than other categories of visual object.

TABLE 3.1. Visual objects (actions) or visual words? (Chinese script ca. 1250 BCE)

				
unwell	traverse	horse	deer	carry

The standardization of sign forms that results from repetitive motor habits of those who produce them under conditions of intensification greatly simplifies the visual processing required for recognition. Exemplars from the set of objects having a particular name can vary immensely in their visual appearance; individual exemplars can be recognized from a variety of orientations and under varying lighting conditions; color and surface texture may or may not make a difference to identity; objects are still recognizable when only a part is visible; and so forth. Pictographic (i.e., object-like) signs, while

remaining members of the class of visual object that they represent, capture and standardize salient visual features of an object or action and present them in a standard orientation (Table 3.1). The second consequence of intensified exposure to a repertoire of signs is that signs come to be recognized via the distinctive visual features of the *sign* rather than of the *object* that the sign resembles and represents. Users' visual expectations about how a sign should appear are trained on the basis of previous exposure to signs, rather than visual associations with their referents. This initiates the gradual wandering away from pictography that characterizes early attested stages of many scripts cross-culturally.

The wandering away from pictography that occurs in the attested early developmental stages of scripts is not simply a process of increasing arbitrary abstraction. It is additionally characterized by the emergence of what I will refer to as a "componential substructure" that visually relates individual signs to one another. Understanding how and why this takes place, and how it contributes to the increasing efficiency with which signs stimulate robust and automated access to the lexicon, requires that we understand another important asymmetry between visual word recognition and visual object recognition. In this case, the asymmetry is a neuroanatomical one that has only very recently been clearly described: cortical regions active in processing visual objects and the visual words of modern scripts show certain distinctions from one another.

THE VISUAL WORD-FORM AREA

As early as 1892, the French neurologist Jules Déjerine proposed the existence of a region of the left cerebral hemisphere that housed a "visual memory center for words" (see Dehaene 2009, 54–60). His evidence came from two previously literate patients who became unable visually to recognize letters or words, despite being otherwise largely unimpaired linguistically and visually. The first was also unable to write, whereas the second could write spontaneously or to dictation but could not transcribe print into handwriting or read his own writing after an interval of time. The second patient was able to identify letter forms by tracing them with his hand. He could also visually identify numerals. Déjerine associated these highly specific deficits with localized brain lesions found during post-mortem examination, suggesting that in the first patient the "visual memory center for words" had been destroyed entirely, and that in the second it had been cut off from sources of visual input.

In the last two decades a diverse array of clinical, behavioral, and

brain-imaging studies have led to dramatic progress in pinning down a specialized brain area of the kind hypothesized by Déjerine, determining its precise location and internal structure, and modeling its role in the reading of modern scripts (Dehaene 2009, 61–119). Cohen and Dehaene (2004, 466) located the region in "a precise subpart of the left ventral occipitotemporal sulcus" (i.e., on the underside and toward the base of the "thumb" in the familiar "boxing-glove" sideways-on depiction of the brain) and coined the term "visual word form area" (VWFA) to refer to it.

The VWFA is adjacent to but distinct from other regions specializing in the recognition of other visual categories, including scenes, faces, and objects (Dehaene 2009, 72–74). Like these areas, the VWFA receives input flowing forward from areas of the occipital lobe, where more low-level visual processing takes place. Vinckier and colleagues (2007) demonstrated a posterior-to-anterior gradient of selectivity within the VWFA, in accordance with this more general hierarchical progression of areas within the visual stream. Exposing subjects to a graded series of stimuli from strings of low-frequency letters to words, via increasingly word-like forms, they found activation becoming "more selective for higher-level stimuli [i.e., stimuli more like real words] toward the anterior" region of the VWFA. In other words, the VWFA initially identifies low-level visual building blocks of word forms (letters in alphabetic scripts) before pooling those identifications to recognize mid-level structures, which can in turn be compounded to distinguish individual words.

The relevance of this gradient of sensitivity to increasingly large visual subcomponents of word forms to what was referred to above as the "emergent componential substructure" of developing writing systems should be apparent and will be returned to subsequently. The hierarchical structure also neatly explains why, after the initial development of a core of graphic primitives, writing systems very rarely introduce unprecedented visual elements, preferring instead to evolve by morphing and recombining the conservatively retained elements already represented in the VWFA hierarchy.

The cultural, acquired nature of literate competence implies that the VWFA is acquired by individuals as they learn a script (Dehaene 2009, 204–7) but presumably also by populations as they develop a writing system. I suggest, and will attempt to illustrate below, that the accommodation of visual word forms to a VWFA developing intergenerationally within a population of script users is one of the major sources of selection pressure acting on synchronic variation within a script.

One final point should be made about the anatomical location of

the VWFA: it is left-lateralized. This distinguishes it from other specialized higher visual areas, as well as from the lower-level visual areas of the brain, which are bilateral. Cohen and Dehaene (2004, 473) suggest a number of reasons for this lateralization, including "preferential connections to left-hemispheric language areas." Here again we see an asymmetry between object-like and word-like visual stimuli, one that may contribute to the latter's ability to stimulate more rapid, more automatic, and less easily distracted access to the lexicon.

THE SHIZHAISHAN PLAQUE

To provide a concrete illustration of the kinds of object-naming behavior from which I am proposing fluent reading emerges over a course of centuries, I will resort to an artifact that does not belong to the cultures of any of the major script traditions but comes from a complex society that lay on the southwest periphery of the Han empire during the last centuries BCE and the earliest centuries CE. The engraved bronze plaque illustrated in Figure 3.1 came from Tomb 13 at Shizhaishan 石寨山, location of several elaborately furnished elite burials (Yunnansheng Bowuguan 1959). The site is located approximately 40 km south of Kunming, in Yunnan. The tomb dates to the Western Han period (206–25 BCE) and is among the richest graves in the cemetery (Zhang Zengqi 1998, 109–13). Although inscribed Han objects (coins, stamp seals, and mirrors) appear in some of the burials, there is no evidence for the local production of texts in any language at that date.

The engraved plaque from Tomb 13, however, is clearly a document, of the ownership or transaction of livestock and humans. We are able to "read" much of the content of this document using the same pre-literate techniques of visual object recognition that its original owners would have used. The document is divided by horizontal lines into informational units, of which four are completely preserved and one only partially. The informational units appear to follow a consistent organization, with a heading or caption made up of a combination of depicted objects unique to that unit and centered at the top of the unit, followed beneath by representations of livestock items and accompanying numerical notation that recur across the first three units (Table 3.2).

The livestock items are all readily interpretable, thanks to both the pictographic realism of their representations and their repeated appearance in the many detailed sculptural depictions of elite life that appear on bronze objects from the Shizhaishan burials (see the line

drawings and color photographs in Zhang Zengqi 1998). Equestrianism and livestock herding were evidently major preoccupations for this group. So too were the enslavement and killing of other humans, which were also depicted extensively in the bronze models from the cemetery. The kneeling submission, severed heads, and instruments of restraint that appear on the plaque have close visual parallels in the bronze sculpture and, presumably, record counts of three categories of human victims and captives.

FIGURE 3.1. Engraved bronze plaque from tomb 13 at Shizhaishan,

Yunnan (after Zhang Zengqi 1998, 260).

TABLE 3.2. Shizhaishan plaque.

Items	*Headings*
pheasant + qi (12), oxen (70), horses	1
heads + bag (?)	2
heads (13), bound + feline (10)	3
uncertain objects	4
(broken)	5

The numerical notation is almost certainly a base-10 system with separate signs for powers of 10 (successively, a horizontal dash, a circle, and a more complex sign, perhaps resembling a shell). Multiples of powers of 10 are indicated by repetition of the signs. The headings or captions are the most difficult (for us) to interpret precisely. The objects that make up the headings can be identified with varying degrees of confidence, but their informational content is unclear. It seems likely, however, that they record the identity of individuals or groups, either donors or owners of the wealth recorded within the unit to which they correspond.

We can only imagine the contexts in which documents like the Shizhaishan plaque may have been "read," perhaps at funerals or during other manifestations of social relationships or economic wealth. However, we can be confident that doing so did not involve a cognitively specialized form of lexical access—just plain, ordinary object recognition and naming. That is why we are able to extract most of the informational content from the document without resorting to any complex decipherment strategies. It is also why we would be able to sketch an approximate, but probably "readable," reconstruction of most of the original document based only on the contents of Table 3.2 without consulting the original a second time.

The arrangement of signs, although showing some degree of spatial regularity, shows no evidence of an emerging script direction. There is certainly no evidence of emergent componential substructure to the sign forms or of departures from pictographic representation. It requires no training to read, just an acquaintance with culturally specific objects (and an ability to deal with numbers in the hundreds). It requires no feat of memorization to associate the signs (I count twenty-three distinct sign types) with their referents of the kind that would certainly have been required to handle the large sign lists of the proto-cuneiform economic documents or the early Chinese divination records from Anyang, which are only transparently pictographic to a modest degree.

It seems unlikely that objects like this plaque would have been produced in any substantial quantity or "read" with great frequency. The material is costly and the engraving technique effortful (although one should be open to the speculative possibility of comparable documents produced with other media and techniques). The visual complexity of the individual signs and the likely context of use in relatively unusual commemorative events also argue against frequent production. Thus, not only is no training—in the sense of specialist education—required to read it, but the absence of highly repetitive and frequent handling of objects of this kind is unlikely to have trained—in the cognitive sense—a class of expert readers. It seems most unlikely that anyone associated with the Shizhaishan culture had a VWFA of the kind described above.

As far as we are aware, a writing system, and the practice of fluent reading, never evolved from this system of notation and the behavior associated with it. However—and this is why I selected this particular example for the purposes of illustration—we do see evidence for the beginnings of processes that might gradually have channeled the behavior associated with the plaque in the direction of literacy.

We have already drawn attention to the suggestion of Cohen, Dunbar, and McClelland (1990) that "consistency of mapping" is one of the important determinants of the high degree of automaticity that characterizes lexical response to word-like as opposed to object-like visual entities. Notice how consistency of mapping to words from visual objects appearing on the plaque is determined by the behavioral task of "reading" it. The structure of the document and its likely function limit the ways in which the visual objects appearing on it could be lexically realized.

Notice also that the depictions on the plaque already show signs of routinized replication. Not only do individual sign types recur within the plaque itself (the numerals, ox, sheep, and the three human categories), but several of them appear elsewhere, incised or cast into other bronze objects from the Shizhaishan cemetery (Figure 3.2). The repetitive demands of the metalworker's task have already led to the selection of essentially arbitrary standardized forms for the depiction of the respective objects (the three-feathered tail of the strutting pheasant, the three-quarter view of the ox head, and so on).

REPETITIOUS INTENSIFICATION

The replication of the Shizhaishan sign forms probably terminated with, if not before, the more general disappearance of most of the distinctive traditions of the Shizhaishan culture. But what incremental

processes could, hypothetically, have elevated the repertoire of signs we see on the Shizhaishan plaque into a full-fledged writing system? What incremental processes could have elevated similar, hypothetically precursor sign repertoires into the early stages of writing that we do in fact find at, for example, Uruk around 3000 BCE and at Anyang around 1250 BCE?

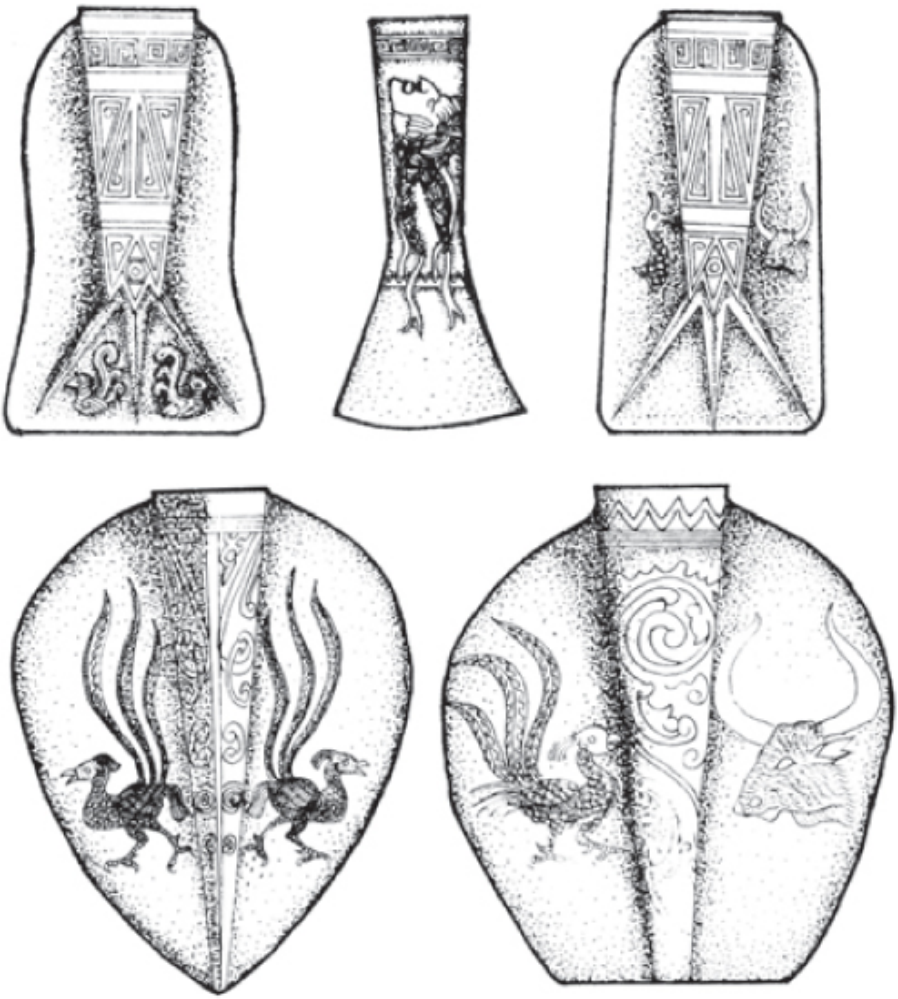


FIGURE 3.2. Replicating sign forms among engraved bronze items from the Shizhaishan cemetery (after Zhang Zengqi 1998, 28, 30, 31).

I proposed above that the progressive emergence of literate competence, and of word-like signs, is the result of increasingly intensified performance, by a growing class of specialists, of the behavior involved in producing and "reading" object-like signs (such as those found on the Shizhaishan plaque), leading to the increased replication of the repertoire of sign forms. Among the most important progressive changes that characterize the growth of social complexity

is the formation of collaborating groups of full-time specialists, often dependent to varying degrees on elite or institutional patronage at major centers of population. Organized, collaborative specialization can promote the intensification, standardization, and elaboration of goods or services produced. It is important to emphasize that this applies not only to craft production—the manufacture of material objects, which, for obvious reasons, is the primary focus of archaeological studies of specialization—but also to specialist activities of other kinds, including economic administration and ritual or religious performance. The association of a system of object-like signs with any sphere of activity that undergoes progressive specialization and intensification supports their increased replication and increases their cognitive impact on a specialist class through repetitive and frequent exposure.

The cognitive consequences of "reading" or producing many different examples of documents like the Shizhaishan plaque on a daily basis, as opposed to doing so only on special occasions, are considerable. Yet the behavior involved is, initially at least, only quantitatively and not qualitatively different. A gradient of intensification separates the two. As I have already suggested, the cognitive habituation brought about by repeated exposure to and production of object-like signs has several particularly obvious consequences. The first is an increased capacity on the part of specialists to memorize, for recognition and production, a larger sign repertoire and a more complex set of documentary conventions. The second consequence of intensified exposure is that signs come to be recognized via memory of the distinctive visual features of the *sign* rather than of the *object* that the sign resembles and represents. Sign forms are liberated from their ties to object-like traits, and replicating lineages of signs are free to respond to selection pressures for more word-like features.

Although intensification of sign-using behavior by individuals is crucial for the cognitive training described in the previous paragraph to take place, a second important variable is the size of the community of sign-users. Collaborating groups integrated through institutional or elite patronage are, again, an important and distinctive feature of the socially complex centers of population with which nascent traditions of literacy are associated. Increasing the group size of collaborating sign-users enables increased replication, innovation, and selection of signs while maintaining the coherence of the sign repertoire and providing for its intergenerational transmission. Thus, I suggest that reconstructing the emergence of literacy in a particular cultural context requires that we look for evidence of candidate precursor activities that may potentially have incorporated sets of object-like

signs and undergone sustained processes of intensification and group-oriented specialization.

The association between the beginnings of Mesopotamian literacy in the late fourth millennium and a single area of activity, economic bookkeeping, is well established. The Uruk cultural sphere is also the world region where we are best able to trace an evolutionary trajectory to literacy from behaviorally similar preliterate practices—from numerical signs on clay envelopes containing tokens, through numerical tablets and "numero-ideographic tablets," to proto-cuneiform and its descendants (Englund 1998, 48–56). More precise assessments than are currently available of progressive intensification and group-oriented specialization associated with the use of these technologies might better support the proposals being made here. Nevertheless, the broader contemporary picture of intensified local and long-distance exchange and disbursal of commodities (Algaze 2001) provides support of a more general kind.

The relative clarity of the Mesopotamian emergence of literacy makes it seem a compelling comparative model for filling in what seem to be developmental missing links or gaps in attestation in other nascent traditions of writing. However, if the proposals put forth in this chapter are correct, documenting the transaction of commodities is not the only activity that could support the evolution of literacy. Any behavior incorporating object-like signs that undergoes intensification in contexts of collaborative specialization can produce the same effects.

The earliest evidence for literacy in East Asia, in the last centuries of the second millennium BCE, is overwhelmingly dominated in numerical terms by records of divination, almost all of which come from a single site near the modern city of Anyang (Keightley 1985, 1997). Several other textual genres appear in the centuries that follow, but it is not until the second half of the first millennium BCE, almost 1,000 years after the first appearance of the Chinese script, that the routine use of writing for economic administration is clearly in evidence. A number of scholars have expressed doubt that the maintenance of divination records could have provided sufficient motivation for the deliberate creation of a writing system, proposing instead that the absence of early economic texts be attributed to the non-preservation of the organic materials on which they might have been written (Bagley 2004; Postgate, Wang, and Wilkinson 1995). Bagley (2004, 235), for instance, is skeptical about whether keeping written records of divination could "supply a convincing motive for developing a lexicon of several thousand graphs."

In response, one might begin by noting that the early Chinese

divination record *is* a fundamentally administrative genre and that sustaining the incessant rounds of rituals to dead kin that divination was used to validate must have been a central economic preoccupation of the Shang kings at Anyang. In that sense, an association in the Chinese case between the earliest writing and the management of divinatory and ritual routines is perhaps already not such a poor match for the Mesopotamian model. However, one consequence of the hypothesis being put forward in this chapter, that writing systems can arise from simpler precursor sign systems through intensification in their use undirected by the long-term intentional goals of their users, is that the need to find a plausible utilitarian payoff for the efforts involved in designing and instituting a full-fledged script is considerably lessened.

In fact, the history of divination in China shows precisely the trend toward intensification and collaborative specialization that I am arguing can drive the process of script emergence. The practice of pyro-osteomancy—the heat-cracking of animal bones for the purpose of divination—is abundantly attested at widely dispersed sites in north China over the two millennia prior to the appearance of writing at Anyang (Flad 2008). This allows us to track changes in the practice over time with considerable precision. As Flad discusses, these include changes in the animal species used, increasingly elaborate preparation of the bones, and the greatly increased intensity with which the practice was pursued at later, larger sites capable of supporting workshops of collaborating full-time specialists. During the last centuries of the second millennium BCE, the intensity of the practice dramatically peaks, most notably at Anyang, where it was supported by the patronage of the Shang royal family. At Anyang there is clear evidence of an unprecedented investment in divination, which was performed (and documented in writing) literally on a daily basis by multiple teams of specialists (Smith 2008, 148–54, 285–300). The rituals directed toward dead members of the Shang lineage, the scheduling and content of which were the primary task of divination to inform, were similarly pursued according to an intense daily routine (Smith 2011). Although the immediate precursors of Anyang writing remain unattested and can only be speculatively reconstructed (Smith 2008, 155–73), nevertheless, repetitious intensification clearly coincides with nascent literacy.

REPLICATION, INNOVATION, AND SELECTION

The discussion above of the selectionist process that I propose drives

the initial emergence and subsequent development of literacy has been cast in fairly general terms. The aim of this and the following section is to use concrete examples drawn from early Chinese to illustrate the process and its evolutionary consequences. I have described how the initial break with sign systems based on visual object recognition may have taken place, and how it permitted sign forms to drift, subject to a variety of selection pressures, away from object-like models and toward the accumulation of word-like traits. I aim to show that this process is ongoing within the early attested history of scripts.

Selectionist evolutionary processes of the kind that I advocate require not just the replication of entities but also the maintenance among them of variation on which selection can act (Boyd and Richerson 1988; Hull 2001, 53–58; Mesoudi, Whiten, and Laland 2006; Szathmáry 2000, 2003). Competent scribes typically do not innovate when they produce sign forms. But there are two ways in which scribes can be thought of as introducing variation into a script. A scribe's motor performance in the execution of a sign may inadvertently—through the omission or modification of a stroke, a modest shift in position of a sign component, and so on—result in a form that lies outside the range of his or her own expectation and might also push the envelope of received expectation of potential readers. Innovations of this kind may become fixed through habit in the practice of an individual scribe and so be replicated sufficiently to influence the expectations of his or her readers. Innovations of this kind are typically slight. However, when script change is observed from a more macroscopic perspective of centuries, some of the changes—the gradualistic "morphing" of sign forms in particular—are probably the result of accumulated and successfully replicating innovations of this kind.

TABLE 3.3. Verbs of motion written with the component FOOT 𠂇.

Regular FOOT: "motion away"			
	zhī 之 "to go"	wǎng 往 "to go"	zhú 逐 "to pursue"
Inverted FOOT: "motion toward"			
	fù 復 "to return"	lái 來 "to come"	gé 格 "to arrive"

A second source of introduced variation involves innovation by analogy. Phonological or semantic analogies between signs underlie the formation of inductive rules about how words should be phonologically or semantically notated. The forms in Table 3.3, from the Chinese script ca. 1200 BCE, show the analogical use of the FOOT component for its semantic associations in writings for verbs of

motion, with the FOOT sign inverted for “motion toward.” (I will refer to recurring pictographic signs or their components using names written in SMALL CAPS.)

Innovation takes place when a scribe consciously or unconsciously, correctly or incorrectly, applies rules of this kind, instead of using visual/motor memory of a received form, to produce a form that departs from the scribal community’s received expectation about how the word is written. The variation here is not the continuous “morphing” referred to above but a discrete recombination of components.

Synchronic variation accrues through innovations of this kind. Galambos (2002) provides a visually and statistically compelling description of synchronic variation in the early Chinese script, concentrating on brush-written manuscripts from the middle of the first millennium BCE and later. I draw on some of his data for the examples that follow.

Consider the following two forms from the earliest stage of Chinese (the second has already appeared in Table 3.3 above):

腹 fù < pjuwk < $^{b/}$puk “belly; abdomen”

復 fù < bjuwk < $^{b/}$buk “to return; go back”

The element common to the two sign forms is a phonetic speller VESSEL, placed next to the belly of the MAN sign in the first form and above an inverted (“motion toward”) FOOT in the second.[2] Before the end of the second millennium, we already find the FOOT being adopted as an additional component in writings for “belly,” semantically unmotivated but presumably an analogical innovation based on the phonetic and graphic proximity of the two signs.

For a later, mid-first-millennium BCE corpus, Galambos (2002, 201, 205– 6) tabulates no fewer than nine non-trivial structural variants of this kind for “return” and twenty-two for “belly,” all occurring in approximately contemporary copies of a single, intensively reproduced set of text formulae. The original phonetic speller VESSEL, together with an inverted FOOT, has become the stable core of all writings for both words. “Belly” with some reliability attracts the MEAT 肉 component as part of a general analogical process toward writing names of body parts with this element. “Return” tends to attract a number of additional elements associated with verbs of motion, including an extra uninverted FOOT in addition to the original inverted one. There is also considerable evidence of the sets of writings for the two words interfering with one another; MEAT

sometimes gets transferred to “return” and the additional motion-verb elements sometimes get transferred to “belly.”

Thus, considerable variation exists in Galambos’s synchronic corpus for selection processes to act upon. As suggested above, readers constantly and largely subconsciously fine-tune their expectations about the appearance of visual word forms simply by being exposed to them. Variant visual word forms compete with one another for the mental resources of readers and replicate depending on how successful they are in doing so.

The most frequent form for “belly” in Galambos’s (2002, 205) list, although it accounted for only 33 percent of tokens in the corpus (74 of 225), does in fact win the competition to become the standard form in received Chinese orthography (腹 = MEAT + VESSEL + FOOT). The overwhelmingly most common form for “return” (153/207, 74%), however, is beaten by its third-place (14/207, 7%) competitor (復), which differed from the former by the omission of a FOOT.

The factors that determine the outcome of competitions of this kind probably include a mixture of the relative frequency of signs and their components, regularity with respect to analogical rules, the maintenance of lexical distinctions, the ease with which a sign form can be produced, and the degree to which a form can reinforce or modify the orthographic memory of a reader through its interaction with the structure of his or her visual word form area. Most importantly, “intelligent design” does not appear to direct the process of deciding how a writing system ought to function.

THE EVOLUTIONARY CONSEQUENCES OF SELECTION

Here I outline three of the most obvious evolutionary effects of the processes of innovation and selection just described: (1) a decline in pictography, (2) the disappearance of the boustrophedon mirror flip in association with stabilization of script direction, and (3) the emergence of componential substructure.[3] All three have parallels in scripts other than Chinese. All can be seen as part of an ongoing gradual transition, spread over multiple generations, away from sign-use based on the cognitive capacity for visual object recognition.

Decline in Pictography

Pristine scripts typically make extensive use of pictographic signs, the most obvious reflection of their cognitively object-like heritage.

Chinese and cuneiform shed their pictography in a gradual process that is essentially complete approximately five centuries after their first attestation (Englund 1998, figure 22; Nissen, Damerow, and Englund 1993, 119). Egyptian hieratic does so on a similar time scale, diverging from the hieroglyphic sign list that is conservatively maintained for use in monumental inscription (Loprieno 1996, 17–18). The Maya sign list appears to be a distinctive exception in that it retains a pictographic aspect across the period of its attestation in all three attested media—monumental inscription in stone, painted texts on ceramics, and codices.

Disappearance of the Boustrophedon Mirror Flip

Scripts eventually settle on a standardized, linear reading order. The reading direction of scripts associated with the recent emergence of literacy is, however, frequently neither standardized nor linear. The earliest Chinese inscriptions allow a single line of text to wander in any direction and to change direction mid-sentence (Figure 3.3). This liberty is replaced by a standard top-to-bottom order in the space of two or three centuries. Egyptian hieratic is consistently right-to-left from the time of its first attestation (ca. 2600 BCE, 500 years after the appearance of the script), whereas hieroglyphic inscriptions retain the earlier option of variable script direction (Loprieno 1996, 18). The standard cuneiform reading order for the Ur III and Old Babylonian periods involves left-to-right sequences of signs within vertically ordered delimiting boxes or “cases.” The vertical columns of cases are present from the earliest proto-cuneiform precursors, but the arrangement of signs within cases shows only a rough tendency toward a linear arrangement at that early date (see also Johnson and Johnson, this volume). The fixing of a determinate script direction permits readers to acquire an efficient, deterministic, and automated saccade strategy for rapidly processing a sequence of signs.

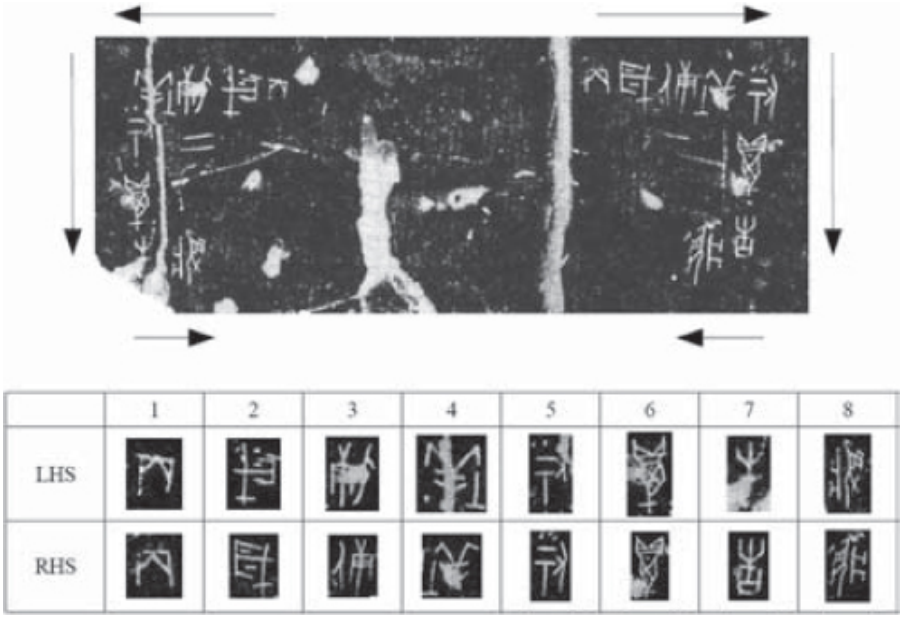


FIGURE 3.3. Two verbatim copies of the same divination text, showing variable script direction and concomitant boustrophedon mirror flips (graphs 2 and 8). Arrows indicate the direction of text (after Zhongguo Shehuikexueyuan Kaogu Yanjiusuo 2003, 118).

Of the scripts that show variable text direction, at least three—Chinese (Figure 3.3; Zhang Shichao 2002, 110–19), hieroglyphic Egyptian (Loprieno 1996, 18), and early alphabetic Greek (Jeffrey 1961, 43–50)—show a left-to-right mirror-image reversal of sign forms (the boustrophedon mirror flip) correlating with changes of script direction. As variable script direction is eliminated to support a simplified saccade strategy, mirror-image variants also disappear. This again represents a paring away of traits associated with visual object recognition. The visual identity of objects is typically preserved under a left-to-right mirror flip, but not in visual words in developed scripts.

Significantly, from the point of view of the cognitive foundations of nascent literacy, a comparable pattern of reversal for a variety of modern scripts, including English, Chinese, and Japanese, has been noted in early attempts at writing by young children and in certain reading-impaired patients (Gottfried, Sancar, and Chatterjee 2003; Schott 2007; Wang, Cai, and Chen 1995, 1998). Dehaene and colleagues (2005, 339) interpret these phenomena in the following terms.

TABLE 3.4. Declining pictography in HEAD.

Date	*Received pictography*
Graph form	

> A principle of mirror generalization seems to have been deeply entrenched by evolution into our visual system, presumably because the identity of most objects in the natural world remains the same under a mirror-image transformation. After exposure to a single image in a fixed orientation, humans and many animals spontaneously treat the mirror-symmetrical version as identical to the original. Furthermore, inferotemporal neurons frequently respond identically to mirror-image pairs of objects, even if they have been trained with only one view.
>
> [Mirror-writing phenomena fit] with a selectionist hypothesis according to which learning to read proceeds by minimal reconfiguration of a preexisting architecture evolved for object recognition, and which initially incorporates a principle of mirror-image generalization.

The same authors also remark upon the similarity of these clinical and developmental manifestations to the ancient script phenomena discussed here.

Emergence of Componential Substructure

This final pattern of development is in many ways the most important. I suggest that it directly reflects the gradual appearance of the visual word form area's hierarchical structure, discussed above. Systems of object-like signs, such as those occurring on the Shizhaishan plaque, show little evidence of the compounding of signs with single lexical referents.

There are two distinct ways in which componential substructure can be introduced into visual word forms. The most obvious and most often discussed source of componentiality involves the reuse of simple signs in compounds to provide phonological or semantic cues. The writings for "belly" and "return" discussed previously are examples of compound signs from the earliest attested stage of Chinese, each with two sub-elements. I have already described how they illustrate a more general tendency for sign forms to attract additional components. In Galambos's (2002, 201–7) list of their mid-first-millennium descendants, with the exception of a single form with two components used to write 1.4 percent of the instances of "return" and 1.8 percent of "belly," all other variants have three or more components. The most frequent (74%) form for "return" has four, and the most complex

(2.4%) has five.

A second progressive development of componential structure happens on a different level, below that of the structural components just discussed. It arises by what I referred to above as gradual "morphing" rather than structural rearrangement through analogical innovation. It manifests itself as the emergence of a discrete and standardized repertoire of simple, often semantically and phonologically unmotivated components that form the fundamental building blocks from which all signs in the sign list are built. This is intimately linked to the progressive decline in pictography described above. Individual signs at an early stage in this decline are typically composed of the flexible contours required for recognition of the sign as a depiction of an object. These are gradually replaced by discrete and repetitive elements drawn from a limited repertoire of abstract strokes. However, the process continues well beyond the limits of pictographic decline, as long as visual word forms are free to evolve away from the anchor of a conservative model.

The progress of the HEAD sign in Table 3.4 illustrates the process. The outcome is a word form constructed from a set of visual elements that are recycled in many other signs in the script. The HEAD sign has been brought into an overlapping geometrical alignment with the dots, boxes, horizontals, and intermediate-level structures of other signs in the received orthography like 百, 自, 前, 羊, 頁, and others. None of this recurring componential substructure has any phonological or semantic link to HEAD. Although the recycling of visual elements is immediately apparent on inspection, to readers and non-readers of the script, it is not consciously attended to in any way while reading is taking place. Nevertheless, like the alphabetic componentiality of visual words in other modern scripts, it likely makes a contribution to the fluent rapidity with which signs stimulate lexical items during reading, operating through the efficient hierarchical structure of the visual word form area with which it has co-evolved over millennia of Chinese literate history.

NOTES

1. This hypothesis undermines the suggestion of Boltz (1994, 51) that a pictographic sign becomes writing at the "moment" when it changes "from being non-phonetic to phonetic." No such momentary change takes place: visual objects, including pictographic signs, are already capable of automatically activating phonological representations.

2. The phonetic speller, which I refer to for convenience as VESSEL, is presumably a pictogram for 鍑 fù < pjuwH ~ pjuwk < b/puk ~ b/puks “wide-mouthed vessel,” although I am not aware of any direct attestations of the pictogram in that sense.

3. For a more extended discussion, see Smith (2008, 49–97).

FOUR

Agency in Death
Early Egyptian Writing from Mortuary Contexts

Laurel Bestock

Writing is a way of communicating a variety of messages across boundaries. The most obvious of these boundaries are space and time. The ability to bridge these boundaries was undoubtedly a significant factor in the development of writing, but in the case of Egypt this model can be profitably expanded. In this chapter, I suggest that the mortuary context within which much early Egyptian writing is found indicates a further desire to communicate across the boundary between life and death to maintain the individuality, social position, and agency of certain dead individuals. That writing could function as a key ingredient in the continued functioning of the dead in Egyptian society is not a new suggestion, but that this might have been significant to the very development of writing has not been explored.

The concept of an afterlife was of defining importance in ancient Egypt from prehistory throughout the pharaonic era; that it is today the most recognizable factor of Egyptian society is only partly the result of a differential preservation of evidence that has favored the mortuary sphere. The role of Egyptian writing in allowing the dead to access and enjoy this afterlife, as well as in mediating the relationship between the living and the dead, is clear from periods where writing was well developed. For instance, the relationship among the dead, living, and writing was enshrined in the standardized offering formula starting in the Old Kingdom. This formula, written in hieroglyphic on the offering area of a tomb, ensured perpetual offerings of tangible things, predominantly food and drink, for the deceased. The writing served both as a text to be recited by living offerers at the tomb and as an insurance policy: in the absence of physical offerings, the words themselves could ensure some level of provision for the dead (Collier and Manley 1998, 36). It is also significant that the formula itself

explicitly links the deceased to the king; the formula itself starts with "an offering that the king gives." A search for permanence beyond the threshold of death has also been seen as a principal motivation behind the development of autobiographical tomb inscriptions in the Old Kingdom, one important feature of which was again to stress the favor shown by the king to the deceased official (Baines 1983, 577). Both these genres had a long history in Egyptian mortuary practice, but there are echoes of related uses of Egyptian writing during earlier phases of its development.

Although it is not clear that continual offerings were part of very early mortuary practice, maintaining both personal identity and social position, particularly in relation to the king, was an important factor in the location, architecture, and provisioning of tombs from at least the earliest period of Egyptian kingship, hundreds of years before the Old Kingdom. Writing, which was extremely restricted during this period, was another means of demonstrating and perpetuating both individuality and social relations; personal names and royal names are the two earliest types of writing in private elite tombs. This practice suggests that the need to balance individual personhood and social position in death was in place very early. Although this is clearest for private individuals in the First Dynasty, starting ca. 3000 BCE, it can be suggested with somewhat more caution for kings in earlier generations. This argument rests on the contexts as much as the content of early inscriptions.

To show that specifically mortuary uses were fundamental in the early stages of Egyptian writing's development, I will first present a brief discussion of the contexts within which early writing in Egypt has been found. Following this, I will lay out what I am *not* attempting to do in this discussion and define what I understand "writing" to be in these contexts. I will then turn to specific examples of inscriptions in mortuary contexts and how they allow us to see the continued agency of the dead.

THE CONTEXTS OF EARLY EGYPTIAN WRITING

The formative stages of Egyptian writing in the last centuries of the fourth millennium BCE are best represented in mortuary contexts. Rock-cut inscriptions from the period are also increasingly well-known. Almost certainly, there are extensive missing contexts, and as such, we remain unsure of the totality of writing's uses at this time. Absolute and even relative dating of many early inscriptions can be

difficult except in cases where associated artifacts can be analyzed in terms of well-defined typologies or, somewhat later, when recognizable royal names are present in the inscriptions starting in the Protodynastic period (ca. 3100—3000 BCE). Both rock inscriptions and mortuary inscriptions are currently the subject of intense and profitable work. It is not my goal here to offer a comprehensive survey or discussion of early Egyptian writing and its various contexts and uses. Rather, I will focus on one context—mortuary—and one potential way to understand the inclusion of writing in this context, that is, the continued social agency of the dead. I do not offer this as an exclusive way of understanding these inscriptions themselves or their presence in mortuary contexts. Early writing in general and early mortuary inscriptions in particular have often been the subject of discussion with regard to their administrative and/or ceremonial functions, and neither function is incompatible with a role for writing in communicating across the boundary of death. To the contrary, understanding mortuary uses of writing may make clearer that administrative and ceremonial functions could be linked, particularly as the need to maintain social position, so intimately linked to place in the administration, appears to be key in the ritualized context of the tomb.

In looking at some of the known mortuary uses of early writing, I will address context on two levels. First, I am interested in the sites, and components of sites, from which early writing is known. This takes into account not only the presence of writing in cemeteries but also the practical exclusion of writing from graves that are not royal or of people closely associated with kings. Even accepting that we are probably missing contexts in which writing was used, the tilt to the extremely high elite is generally thought to reflect the original uses of script; the limitation of literacy and, to a lesser extent, inscribed objects to the high elite is a fairly constant feature of later Egyptian culture (cf. Baines 1983). Second, at a more minute level of context, I will look at the specific media used for writing and the objects to which writing is attached. Unlike the restricted types of monuments and sites associated with writing, the artifacts associated with script are, in fact, notably diverse.

In this case I will quite intentionally *not* examine in detail what early inscriptions say in the sense of what words are used. Discussions of reading are both extensive and inconclusive, and I hope that by moving away from a focus on specific meaning I will be able to better approach the more general question of the reasons writing is found where it is found. I will also not attempt to catalog every known instance of early Egyptian writing—an extremely difficult task as the corpus continues to grow rapidly—but will instead focus on a limited

body of material from two periods, separated by approximately 200 years. The first period is the Naqada IIIa, dated to approximately 3300 BCE; this is the time from which the first examples of signs universally agreed to be writing are found. The only substantial corpus of material from this period was found in the late 1980s in tomb U-j at Abydos in southern Egypt. The excavation of this tomb was undertaken by the German Archaeological Institute, Cairo, and has been extensively published and discussed in the secondary literature (Dreyer 1998; virtually every discussion of the development of Egyptian writing since the discovery of the tomb has incorporated its evidence). The second period I will consider is the early First Dynasty, ca. 3000 BCE, at which point writing is more common and many more words are legible to us because they are related to more fully developed hieroglyphic writing.[1] Even in this period, however, the recovered contexts of Egyptian writing are extremely limited, with a majority of known inscriptions coming from mortuary contexts and concentrated at the very highest elite level of society.

DEFINING EGYPTIAN WRITING

To demonstrate that early writing can be seen in part as a conscious projection of power and relationships from this world into the next, it is necessary first to define early writing. This is not an easy task; the earliest inscriptions are short, they utilize words but not grammar, and their meaning is often open to debate. Nonetheless, it is generally accepted that writing is present in tomb U-j. The discrete, representationally based signs in the inscriptions found in tomb U-j can be considered part of a writing system because they recur in conventionalized form without substantial variation in multiple iterations (variation in direction is immaterial as later hieroglyphs can be written either left to right or right to left), do not appear to refer to the objects (such as birds) that they are representations of, are found in different orders and combinations using the same signs, and in some cases are recognizably similar to later hieroglyphs. Indeed, the corpus of signs here and the regular way in which they are used have led scholars to conclude that they cannot belong to the first stage of Egyptian writing, which must be somewhat earlier (a discussion and references can be found in Baines 2004, 154).

One complicating factor in defining early Egyptian writing is locating the dividing line between art and writing. Not only is the script representationally based, but contemporary iconography also seems to encode specific meanings, although not necessarily specific words. Writing also comes into being at a time when representational

art was in a stage of rapid development and codification. Which symbols are words, which are iconographic, and is it important to distinguish between the two? I hope to show, as a subsidiary point to my main argument, that although it is possible to identify the two types of symbols, they are extremely closely intertwined and should be considered in conjunction with one another. Writing and representational art were used by the same people; we know of them from the same contexts, often the same objects; and the messages they convey seem to be related. This is true not only of monumental inscriptions such as those on slate palettes, which Baines has described as "an emblematic mode of representation (or textual encoding) that stands between normal representation and writing" (Baines 1983, 576), but also of media such as seal impressions, which can be more closely connected to immediate communication. This should not surprise us: the close relationship between writing and image is well documented from later periods and was clearly something the Egyptians celebrated and played with. That play between text and image was always a part of hieroglyphic writing. Hieroglyphs as a script do not exhibit some of the characteristics noted by Smith (this volume) as characteristic of script development; for instance, hieroglyphic Egyptian never sees a decline in pictographic elements or the imposition of a standard direction of writing. These changes do characterize the more cursive hieratic that was probably in use almost as early as hieroglyphic writing but was used in different contexts. The difference in development between hieroglyphic and hieratic scripts that always left the former more closely related to representational art is relevant to the continued employment of hieroglyphs in ritualized settings such as the tomb. This is true precisely because some images that are not words in tombs were used in ways that parallel and supplement writing. The blurriness of the boundary between text and image was deliberately maintained.

ABYDOS TOMB U-J

The earliest-known uncontested examples of writing from ancient Egypt come from tomb U-j at Abydos, dated to approximately 3300 BCE (Figures 4.1 and 4.2). This tomb was found in 1989 by Günter Dreyer and Ulrich Hartung and lies in a cemetery that had been used only by the high elite for centuries. By the time of tomb U-j the cemetery was so exclusive that it appears only one tomb was built at a time, implying a single individual per generation was accorded burial here and thus, presumably, was to be counted as the sole head of the social hierarchy for the locality or the region. This exclusivity, in conjunction with the architectural complexity of tomb U-j, the wealth

of the associated grave goods, and the presence of some iconographic elements that may be linked to later kingship, has led the excavators of the tomb to dub its owner a king (Dreyer 1998).[2] The tomb was disturbed but not ransacked. Its interpretation is complicated by the fact that no other tomb in Cemetery U had contents nearly as well preserved, nor were previous or immediately subsequent tombs as architecturally complex, meaning that U-j stands as something of a disconnected monument.

Notable in the U-j corpus are the utilization of varied media for inscriptions and the fact that the content of the inscriptions seems in some ways linked to the medium employed. This means that there is an interaction between the artifact inscribed and the words of the inscription; together they communicate a more complicated message than either would alone. This is further made clear by the distribution of types of inscribed goods throughout the tomb; some are found in some places and others elsewhere, with very little overlap.

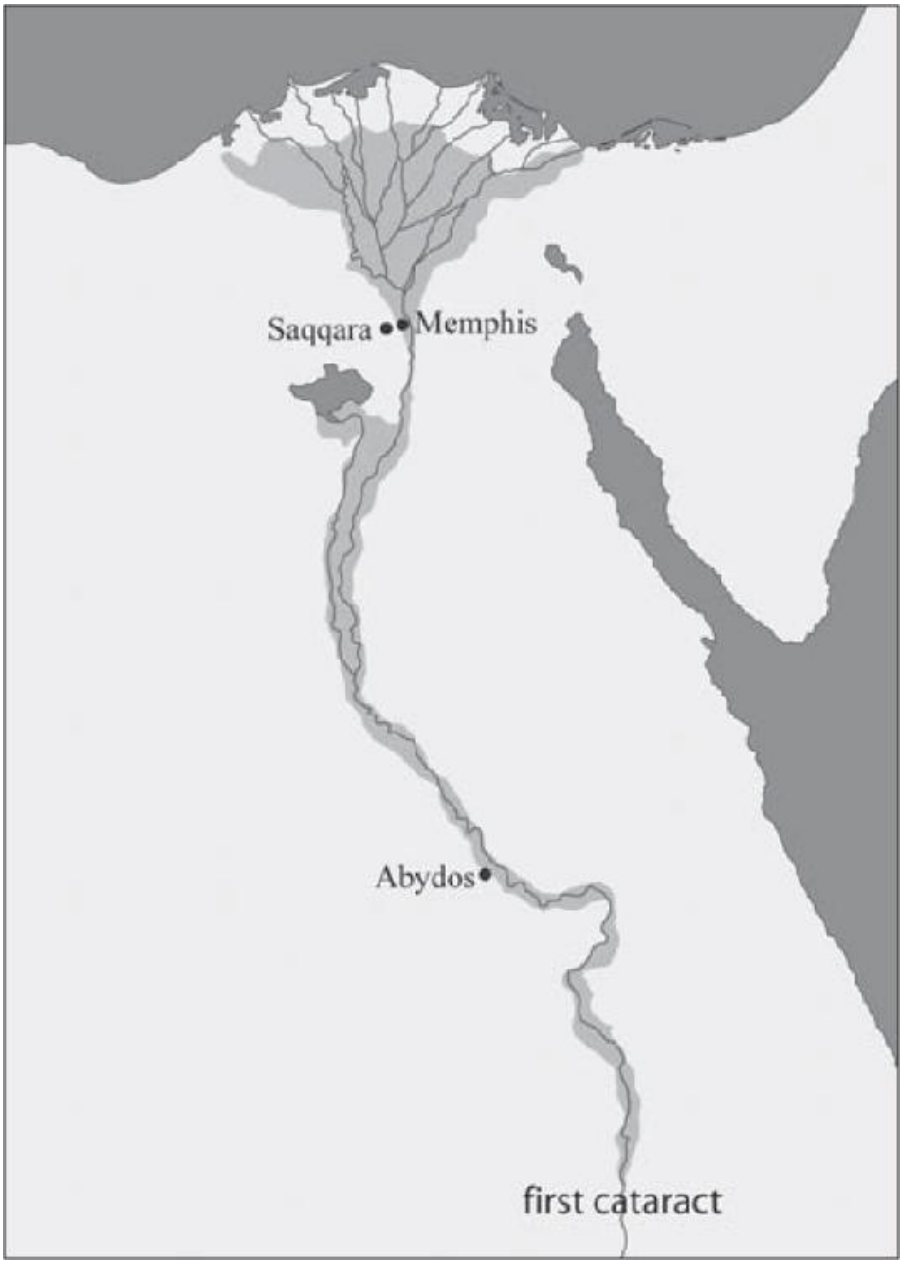


FIGURE 4.1. Map of Egypt showing the location of sites associated with early examples of writing.

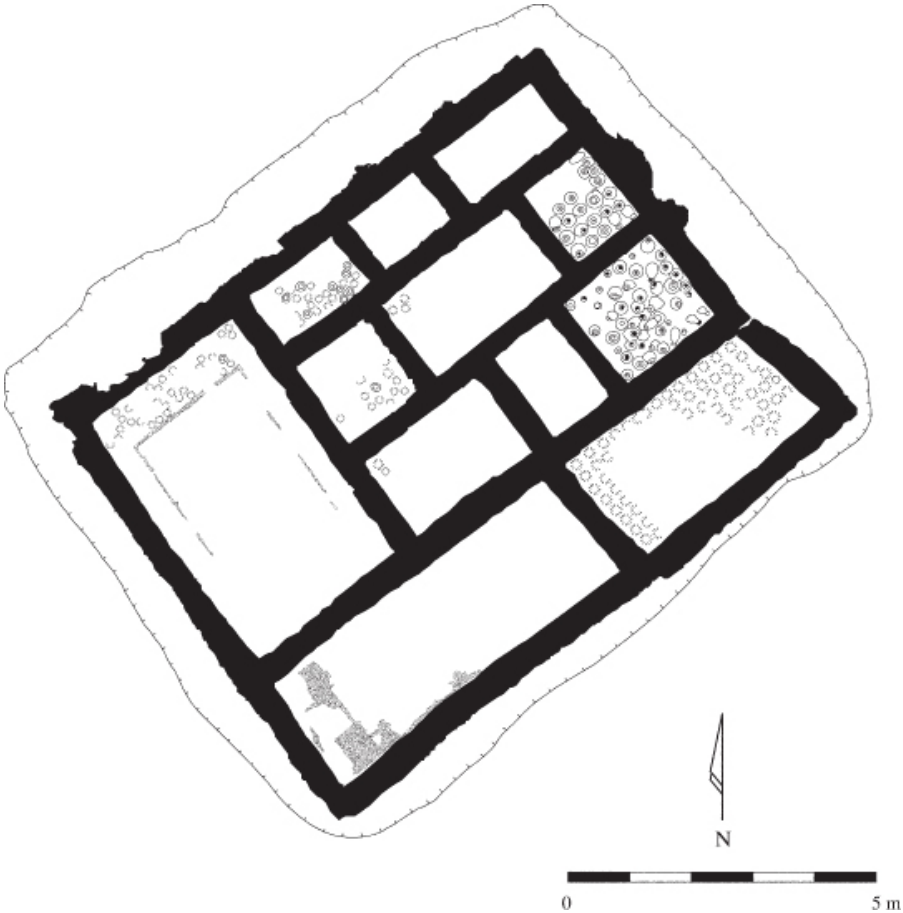


FIGURE 4.2. Plan of the subterranean chambered tomb U-j at Abydos, dated to approximately 3300 BCE. This tomb had preserved remains of inscriptions on multiple media. These inscriptions are the earliest agreed-upon examples of Egyptian writing. Plan based on work by the Deutsches Archäologisches Institut, Kairo.

Three media with inscriptions or iconographic images are known from U-j: incised small tags, ink on ceramic vessels, and mud seal impressions. The inscriptions utilize a fairly extensive corpus of signs, using them both singly and in larger groupings. Some signs occur in one medium but not the others. The most discussed type of inscription is that on ivory or bone tags (Figures 4.3 and 4.4). Although some tags are blank, most have inscriptions that are numbers or, presumably, words. As the combinations and orders of signs are variable, it has been proposed that the system behind their utilization can be properly understood as a script (Baines 2004, 157). It is generally accepted that the words recorded on the tags are nouns, and the greatest consensus sees them as indicating locations, perhaps places from which either the tags themselves or the goods to which they were attached came

(Dreyer 1998, 113—18; Wengrow 2006, 203). Attempts to read royal names in the inscriptions are not universally accepted, and no argument has been made that they represent types of goods. The tags are very small, a centimeter or two to a side, and are drilled at one corner perhaps so they could be attached by a cord to artifacts. We have approximately 150 tags, but we have none of the artifacts to which they belonged. The tags were concentrated in the southern chamber of the tomb (Dreyer 1998, 113—36), suggesting that the artifacts they were attached to were intentionally separated from other goods.

FIGURE 4.3. Examples of the ivory and bone tags found in the southern chamber of tomb U-j. The illustrated tags include both the numeric type and those employing signs in variable combinations. Photographs courtesy of Günter Dreyer and the Deutsches Archäologisches Institut, Kairo.

FIGURE 4.4. Further examples of ivory tags from the southern chamber of Tomb U-j. While this is the earliest concrete evidence of Egyptian script, it seems evident from the systematic way signs are employed that this is not the first stage of the development of writing. Photograph courtesy of Günter Dreyer and the Deutsches Archäeologisches Institut, Kairo.

Some indications of the means of the tags' production have been identified. Some scholars have argued for distinguishing different hands on the basis of variability in the formation of some signs, suggesting that we have multiple authors represented (Kahl 2001, 111). Furthermore, many of the tags seem to have been "mass-produced": a longer strip of ivory was inscribed with many signs, and these were then separated into individual tags by scoring and breaking the ivory (Dreyer 1998, 137).[3] These two likely facts combined—

different authors but also some production in a single time and place —must figure in our assessment of these objects. One suggestion is that the objects receiving tags were labeled in an intermediate stage of collection, not at the point of production (unless numerous items came from each place, we would not expect the tags to have been mass produced at the point of production), but before they were collected as a single group (in which case we might assume a single administrator would have labeled everything). If these rather large underlying assumptions are correct, it could be argued that nothing intrinsic to the object or its initial collection requires it to be labeled; the labeling is necessary during the assemblage into a larger group. The known use of the group is in a grave, where the only person who will have access to it is the deceased. That the deceased was not static but rather was expected to continue to interact with the goods in his tomb is quite clearly shown by the provision of slits that serve as model or notional doorways leading between rooms of the tomb. Although they are too small for a living human to pass through, it is difficult to explain these slits as anything other than doors for the deceased to move around his tomb, which Dreyer and colleagues have interpreted as a model house (Dreyer 1998, 6-7).

The second artifact type bearing inscriptions from U-j is the ceramic vessel, in this case mostly storage jars with wavy handles (Figure 4.5). These bear signs, some of which are found in the tag sign corpus and some of which are not. The signs are post-firing inscriptions in ink and tend to be more cursive in nature than the tag inscriptions. A few signs are predominant in this group, most notably scorpions. There are over 100 inscribed jars, stored in the two northwest chambers of the tomb. No other Naqada Illa ink inscriptions are known. There is nothing to indicate at what point the jars were inscribed, save that it was after firing.

FIGURE 4.5. Ceramic jars with scorpion inscriptions from tomb U-j. Photographs courtesy of Günter Dreyer and the Deutsches Archäologisches Institut, Kairo.

The final category of inscribed artifact from U-j is a bit more difficult. Numerous mud jar stoppers have been found here, sealed with cylinder seals. There are impressions from several different seals, all of which are broadly similar. They contain a central plaque area with one or more signs, surrounded by a patterned area (Hartung 1998, 187-217). The pattern can be composed of geometric shapes, animals, or other signs singly or in pairs. The pictures in the central plaque are most often understood to have no word values. It has been suggested that the formal organization of elements on these seal impressions indicates an encoding of information that is at the same time not writing; possibly the uniqueness of each seal is indicative of ownership (Kemp 2000, 234). They utilize a limited corpus of depictions and organize these in ways that apparently have internal logic. Like the tags and sealings, they combine in different ways some of the same elements and were attached to grave goods. I agree that the seal impressions from U-j are unlikely to be writing in the sense of indicating words. But I do think that they were intended to communicate defined messages that depended simultaneously on the symbols employed, their arrangement with reference to one another, the goods to which they were attached, and—in their final context—the distribution of those goods in the grave. The only person with access to the entirety of this complex message was the deceased himself.

Most of the sealings have been found in connection with a type of jar most often understood as being of Canaanite origin. Although there is some disagreement about the manufacturing location of these jars, the little study of the seals' material that has been done unambiguously indicates that they were made of Nile mud. Petrographic study of the pots led to the conclusion that they were unlikely to have been manufactured in the Levant, and the authors of the study suggested they were, in fact, Egyptian imitations of Levantine forms (Porat and Goren 2001). Neutron activation analysis of the vessels showed the most likely origin for the clays to be the Levant (McGovern 2001). The later study included a test of the sealing mud and concluded it was Egyptian. Further study of these vessels and of clay and temper sources in both Egypt and the Levant is clearly necessary to determine with more certainty the origin of the jars, but the origin of the sealings seems secure. Thus, it is possible that the jars and their contents were imported from the Levant, but the act of labeling them occurred in Egypt—the emphasis in labeling thus being on their collection more than their manufacture or place of origin. This information may lend support to the suggestion that the ivory tags were also placed on their associated artifacts after the point of production and that it is the gathering of the material as much as the material itself that required labeling. If anything, this suggests a reading of the importance of the seals and tags that places them solidly between the supposedly separate poles of administration and ceremony proposed by Postgate, Wang, and Wilkinson (1995). They may best be seen as the marking of goods at their time of collection by the administration for use in the ritualized burial of the king. Administration and ritual are not separate in early Egypt. As such, arguing that these inscribed materials continued to allow the deceased inhabitant of tomb U-j to function in the afterlife in ways similar to those he enjoyed in life complements rather than contradicts an understanding of the same inscriptions having simultaneously administrative and ceremonial functions in life.

FIRST DYNASTY INSCRIPTIONS IN MORTUARY CONTEXTS

All three types of inscriptional material seen at U-j are also present in the First Dynasty (ca. 3000—2890 BCE). All are more complex in their utilization of signs. As they are numerous, I will not go into detail about the artifacts themselves but will confine myself to discussing their contexts.

Tags, inscribed pots, and seal impressions in the First Dynasty are

found not only in association with the royal graves at Abydos but also in association with private tombs. The royal tombs are very close to Cemetery U Abydos and in some ways constitute a continued tradition of the burial of rulers in this place (Bestock 2009). There is no question at this point that we are dealing with royalty. The individuals buried in these tombs took the title "Horus" and wrote their associated name within a device called a *serekh* (Figure 4.6); Horus is one of the titles associated exclusively with kingship for the next three millennia. The first appearance of the serekh dates to approximately 3100 BCE; its form was regularized over the course of a few generations in what is now often called "Dynasty 0," in acknowledgment of the fact that kingship as an institution went through a period of rapid growth at this time. The individuals who received serekhs appear first to have been kings only in southern Egypt, but by the early First Dynasty (ca. 3000 BCE), if not a generation or two earlier, Egypt appears to have been politically united under these individuals. Unsurprisingly, the tombs of these kings have been one of the major sources of inscribed material from the First Dynasty, but as they add little to the interpretation of the presence of writing sketched above concerning tomb U-j, they will not be considered here. The non-royal tombs of the First Dynasty that have yielded extensive inscribed material are of two types, both of which, although belonging to private individuals, are intimately linked with the emerging institution of kingship.

FIGURE 4.6. Photograph and drawing showing the repeated serekh of King Aha of the early First Dynasty. This example comes from a cylinder-seal impression on a jar stopper from a subsidiary grave at Abydos. Photograph by Jason Goodman; drawing by Krisztián Vértés.

The first of these types of private tombs belongs to people believed to have been the highest administrators; these tombs are located in the cemeteries near Memphis, the capital of the country that was founded either immediately before or during the very early First Dynasty. The majority of these tombs are found at Saqqara (Figure 4.1). These massive tombs are built of mud-brick on a rectangular plan with complex patterns of niches on all four of their faces; this form is reminiscent of the serekh sign, which itself almost certainly represents a type of monumental niched-façade architecture. The mastaba tombs of the Memphite cemeteries were extensively stocked with goods, including luxury objects and furniture carved out of ivory, stone vessels, and pottery vessels. Both the tombs and the goods in them can best be seen as gifts from the king to these individuals; in fact, their size and opulence meant that the original excavator of the

Saqqara tombs considered them the “real” royal tombs, consigning the previously excavated Abydos tombs to the place of cenotaphs (Emery 1939). This view has been almost entirely rejected by numerous scholars, starting with Barry Kemp (1966, 1967) and continuing through the most recent work of David O’Connor (2009). Although now considered erroneous, Emery’s interpretation of these tombs as royal is still of interest because it indicates the extreme size and importance of these tombs, as well as their many connections to kings, including the common presence of royal names on artifacts in them.

The second group of graves containing such inscribed objects is usually considered subsidiary. These graves are quite small but were clearly prestigious: they cluster around the royal tombs and mortuary temples of the First Dynasty at Abydos. Subsidiary graves are also found around some of the large elite tombs at Saqqara and the other Memphite cemeteries, where they are fewer in number and less often associated with inscribed material. The people buried in subsidiary graves around the royal monuments seem to have been of high status and may constitute the personal retinue of the king. Strong circumstantial evidence suggests they were sacrificed to accompany the king into the afterlife (Bestock 2009; Petrie 1925).

The relationships between the king and these two groups of people —the high administrators and those personally close to the king—thus seem to have been maintained into the afterlife. This is demonstrated, in part, by the location of the tombs—with administrators buried near the seat of administration and his personal retinue buried near the body of the king—and in part by means of the objects in the tombs, many of them inscribed and many of the inscriptions bearing the king’s name (see, e.g., Figure 4.6). The relationships thus maintained are far from equal but do seem mutually dependent. The move of writing and royal iconography out of purely kingly contexts does not indicate a lessening of royal power and prestige but rather shows that the functions of kingship at both the practical and ceremonial levels, both in life and in death, are now complex enough to require the participation of a fairly large and diverse group of people.

Remarkably, there is slight evidence from one of the elite mastabas at Saqqara that the very act of writing, and thus its importance for defining not only goods but also scribes within the emergent royal system, was considered to have a place in the grave and the afterlife. Tomb S3505 had—among a multitude of inscribed objects of many types—at least five blank perforated wooden tags and what appeared to be a blank roll of papyrus (Emery and Saad 1938). If indeed these objects are the tools of the trade of a scribe, known from his tomb’s size, location, and wealth to have been a member of the high elite of

the First Dynasty, then we may extend the notion of script as enabling individual agency in the afterlife to include the process as well as the product of writing.

In addition to tags, pot inscriptions, and seal impressions, there are several other inscribed media from the First Dynasty. Almost all of these are exclusively associated with the royal, administrator, or subsidiary graves. There is one type of inscription in particular that I would like to end with, because it lends support to my argument that one use of early inscriptions was intentionally mortuary. Many tombs in the First Dynasty, royal and non-royal, were provided in some form with the name of the tomb occupant. This was sometimes true of labels and seal impressions, which could contain the name of both the king and an administrator, most often probably the tomb owner. In most cases in which a specific tomb can be associated with a particular individual, names are known from stelae (Figure 4.7). More than 100 such stelae are known from the royal and subsidiary graves, always in stone, quite fine in the case of royal tombs and quite crude in the case of subsidiary graves.[4] It is not clear if these were placed in the graves themselves or were above ground locations for the living to present offerings to the dead, but most scholars assume that they were above ground, as were later stelae that served as locations for cult offerings from the living to the dead.

The stelae are not, however, the only way that names were attached to graves. Sixteen of the subsidiary graves around the tomb of Djet, third king of the First Dynasty, have names written inside the graves in red paint. None of these graves had stelae associated with them (Petrie 1900, 8, plate LXIII). A name on a wall inside the grave cannot have been the location of offerings by the living. It is conceivable that the painted names were labels, telling the living where to bury whom at the time of the mass funeral. Nevertheless, this seems far less likely to me than that the painted names are related to the stelae, and that both were intended to allow the eternal continuation of the deceased's name. I suggest that the writing of the names on the graves' walls creates a permanent link among the location of the grave, the body of the person in it, and his name. The grave and its contents thus preserve not only the deceased's relationship to the king in the afterlife but also his own identity as an individual; indeed, his continued service to the king must have been predicated in part on the maintenance of his individuality, role, and status.

FIGURE 4.7. Two private stelae from subsidiary graves adjacent to the First Dynasty royal tombs at Abydos (OIM E5869 and OIM 5865). Photograph courtesy of the Oriental Institute, University of Chicago.

CONCLUSIONS

In conclusion, I argue that one fundamental use of early writing is not only to reflect in life but also to allow in death the continuity of personhood and social relationships for the king and high elite of Egypt. This is more fully accomplished by using writing and iconography together; the separation between the two is anachronistic. That personhood and social relationships could and should be maintained in the afterlife is a highly visible and fairly static element of Egyptian culture in succeeding millennia. By examining the contexts of early writing, I believe we can identify this theme as early as we can identify writing.

Writing thus sits at the nexus of two strands that were emerging as inseparable in nascent Egyptian kingship and high-elite culture: the physical control of goods and people and the ideological role of the elite in life and also in death. Our understanding of the rise of the Egyptian state and of writing depends on identifying the multiple uses of writing and seeing these uses as complementary. Some of the distinctions we draw between administration and ceremonial display, and between life and death, appear not to have been such stark

contrasts to the early Egyptians. What is clear is that writing was one means by which dead Egyptians continued to exercise agency.

ACKNOWLEDGMENTS

My thoughts on this subject have been greatly inspired by the writings of John Baines, one of the most perceptive and balanced commentators on early Egyptian writing; if I have misunderstood or misrepresented him at points, it is entirely my fault. Of special note is his recent and much more comprehensive overview of the social and functional contexts for early Egyptian writing and its antecedents (Baines 2007). Additional thanks to Kathryn Howley and Simon Sullivan for editorial and bibliographic help with this chapter.

NOTES

1. The most extensive survey of Early Dynastic writing remains Kaplony (1963); the degree of disagreement that persists regarding many of his readings indicates the difficulties that remain in translating inscriptions from this period.

2. Not all elements of this argument are universally accepted; for instance, David Wengrow has challenged the interpretation of an ivory object as the head of a scepter, seeing it instead as an adze (Wengrow 2006, 202). Although the specific title and name of the individual for whom U-j was built and his relationship to the later institution of kingship may be matters of debate, his uniquely high status for his time is not.

3. Further discussion of this potential mass production is given by Wengrow, who does not necessarily see such a practice as indicative of an extensive administrative system at the time (Wengrow 2006, 206).

4. Kaplony gathered the examples known (Kaplony 1963); relatively few stelae have been found since. Geoffrey Martin (2003) is currently systematically studying the private stelae of Abydos.

PART II

The Material Agency of Early Writing and Incipient Scripts

FIVE

Reembodying Identity
Seals and Seal Impressions as Agents of Social Change on Late Prepalatial Crete

Emily S.K. Anderson

Archaeological evidence indicates that the island of Crete in the southern Aegean saw processes of significant social and cultural change at the turn of the second millennium BCE. In the Cretan chronology, this moment stands as the transition between the Early and Middle Minoan periods (EM and MM, especially EM III–MM IA, ca. 2200—1900 BCE), at the end of which the Aegean's first "palatial" social formations are traditionally understood to have emerged on the island. Evidenced changes in material culture, economic strategies, exchange, and settlement patterns are thus grouped together under the rubric of a palatial transition and thereby linked to the contemporary construction of large monumental architectural complexes at various locations around the island. For the past several decades attempts at defining the impetus behind these changes have constituted one of the principal foci of research in Aegean Bronze Age archaeology, with a range of different theories interpreting it as primarily economic, climatic, or political in nature.

As a departure from such previous approaches, I attempt with this chapter to explicitly consider the problem of EM-MM sociocultural change through the lens of a particular object corpus, to see how alterations in the world of objects may be understood not only to have *reflected* changes in human behavior as passive tools and signifiers but in fact to have *participated in* and even *guided* those crucial transformations in action and interaction that we identify with the development of palatial society. My focus is on the earliest stylistic/iconographic group of engraved seal stones represented across the island, known as the "Parading Lions" group (Yule 1980, 208–9; cf. Sbonias 1995, 89–99). This group, dating to the EM III/MM IA period, presents several key developments in glyptic design on Crete that

imply fundamental changes not only in how seals and their impressions were understood on the island but also to the manner in which humans interacted with seals and—through seals—with one another.

The use of seals has often been considered in terms of its relationship to early writing. In various places the two practices have coincided, as was the case on Bronze Age Crete, where the signs of early scripts were sometimes engraved on seals, and seal impressions and writing were often rendered together on the same objects, such as sealings, nodules, and roundels (see, e.g., Branigan 1969; Hallager 1996; Palaima 1990; Schoep 1999). Seal use and writing can also be seen to coincide in terms of their representational character. Taken in this light, both seal motifs and signs from scripts are understood to have been conventionally associated with particular stable values, with which they could be identified in each instance of their reproduction (whether it be a seal impression, an incised sign, etc.). In turn, a seal impression or written text is approached as a durable means through which a message prepared by an absent human could be "read," according to certain rules, in another context (potentially distanced over both time and space). This perspective thus posits seal impressions and written texts as material transcriptions of such predetermined messages.

In this chapter, I do not wish to challenge the relationship between seal use and writing but to explore a perspective through which both can be complicated by reconsidering the dynamics of their lived material practice and thereby problematizing the primacy of their representational character. Working in a direction similar to Tim Ingold's (2000) reassessment of writing as an embodied and "continually responsive" "skill" rather than merely a performed "technology" of regulated representation and transcription, I examine how people experienced interaction with seals and impressions, recognizing each as a distinct material reality embedded in (and often traveling between) particular lived contexts. Thus, I contend that although certain changes observable in the later Prepalatial (EM III–MM IA) glyptic corpus crucially altered the semiotic underpinnings of seal use, such developments must be considered with respect to how people actually experienced and valued the involved materials in light of these changes. New emphasis is thereby brought to persons' direct engagement with and consideration of seals and the impressions rendered with them—that is, to the "present" moments of persons' experience of the objects instead of only the foregone moments and absent humans thought to be signified by them.

Through this approach, the locus of social identity and agency

associated with both the seals and especially manifest seal impressions is crucially revised. I contend that the seals were endowed with attributes that elaborated their nature as distinct sociocultural entities that possessed the simultaneous abilities to link and distinguish themselves from one another (through aspects of style, iconography, technical attributes, symbolic and contextual associations, etc.). As such, the seals, although importantly and intimately connected to the humans who used them, were nevertheless experienced as having a separate social character. Likewise, instead of seeing a movable seal impression as simply a signifier of a displaced agency representing a human and action (the sealer and act of impressing the seal) necessarily distanced from the impression's current location, I argue that in fact agency was construed in terms of the "present" context in which another human engaged with the seal impression—apart and distinct from the human sealer. Thus, I investigate not merely the semiotic function of seals and their impressions in signifying specific social identities attached to their human users but also how these objects in fact possessed and embodied agentive social identities of their own. As the loci of independent (yet responsive and hence fluid) identities, the objects could follow unique trajectories of interaction with and between humans, performing as active participants in a powerful new means and mode of material-symbolic social interaction on the island. This interpretive approach can be connected to a broader recent effort in which archaeologists play a crucial role—namely, the reconsideration of potential agencies in the material world beyond those of humans, in things, landscapes, matters, and so forth (e.g., Gosden 2005; Ingold 2000; Knappett 2004; Knappett and Malafouris 2008; Tilley 2004; demonstrating the diversity of perspectives: Ingold 2007; Tilley 2007; Knappett 2007).

The independence of the seals and impressions as embodiments of social identity was connected to people's experience of two distinct but interrelated aspects of the objects, which I trace out in the first two sections. First, in a break from earlier seal traditions, the Parading Lions seals were each engraved with a differentiated motif, unique to each seal, which was replicated in movable impressions. These differentiated motifs together constituted a syntax of signifying terms through which an impression could retain the particularity of its signification even when traveling beyond local contexts in which members of a community had personal knowledge of one another. This semiotic development in seal design thus ultimately provided a radical extension of the temporal, spatial, and social parameters of seals' practical abilities to signify social identity. Second, the Parading Lions seals incorporated unprecedented foreign components, including hippopotamus ivory and lion imagery. On the one hand, these

components embedded material for new “biographies” into the objects, semantic and material content that likely involved notions of distance, travel, and distinction. On the other hand, the novel character of these foreign elements within the island sphere allowed them to be effectively integrated into a fundamentally new Cretan cultural object, which presented new sensory experiences and had a pioneering role in the changing landscape. So positioned, they became key elements of the seal group’s distinctive transregional style and iconography, providing a new manner of material cultural link among social actors across the island.

As I discuss in later sections, the powerful combination of these two innovative aspects of the Parading Lions objects provided for their ability to move on independent social paths, acting as social actors in their own right. In this position, they could engage humans at multiple points along their action trajectories, but their social existence fundamentally extended beyond any single link to a human. This interpretation marks a decisive break from typical understandings of the seals’ and impressions’ relation to humans, in which the objects are understood as mere signifiers whose social identities were the same as those of their human owners. I instead conclude that the objects’ potential to move free of and between humans, and their particular involvements in realized actions, provided them with their own agentive social identities, and it was this, as much as their referential function, that subtended their role in processes of sociocultural change.

DEVELOPMENT OF THE SEMIOTIC UNDERPINNINGS OF SEAL USE ON EARLY-MIDDLE MINOAN CRETE

Seals on EM-MM Crete were most likely worn by their owners like pendants, hanging via pierced string holes. This intimate physical link was often preserved in death, as most examples of excavated seals from these periods come from grave depositions. In use, the seals typically functioned as stamps: the relatively flat “face” of a seal was engraved with a motif, and when the object was impressed into a lump of moist clay the engraved motif was transferred in a textured mirror form to the clay. These lumps of clay, referred to as “sealings,” were attached to objects, usually at points of closure, and thereby “formed a seal” as they dried. In this way, all seal impressions can be understood, on one level, as having functioned as semiotic texts.[1] As texts, the seal motifs, captured in clay, recorded the action of a seal

being impressed by a human and therewith also testified to the will of that human to impress his seal in a given time and place and to a certain perceived end. This was also true of seal impressions stamped directly onto objects, such as vessels, or onto a glyptic document such as a nodule (see Hallager 1996; Weingarten 1986). The impression, formed by one human, could later be "read" by another who pieced together the meaning of the impression/text in the absence of the human sealer. From this perspective, seal use was thus fundamentally an interactive process, which extended the human seal possessor's ability to communicate a message with another human into a temporal/spatial context apart from the seal possessor's "present" one.[2]

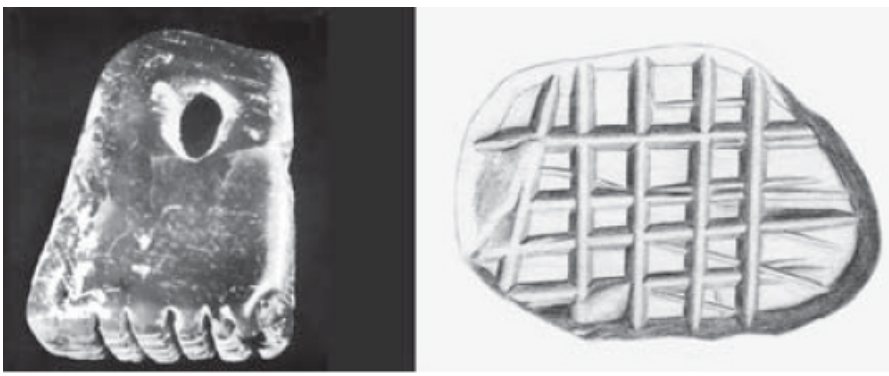


FIGURE 5.1. Example of a typical EM I—II soft stone seal (seal and drawing of impression). Image reproduced from *Corpus der Minoischen und Mykenischen Siegel Band II, Iraklion Archäologisches Museum,* Teil I; edited by N. Platon, 1964. Berlin: Mann. Number 199, Lebena IIa; not to scale.

The earliest Cretan seals (EM I—II), from the phase that immediately preceded that of the Parading Lions group, were fashioned of readily available materials including soft stones, sea pebbles, bone, and boar's tusk and appear to have been made locally in even extremely small village settings (see Whitelaw 1983 on Myrtos Fournou-Korifi, and Becker 1976 for plentiful Cretan soft stone sources). The motifs engraved on these earliest seals were generally of a very simple nature (Figure 5.1).[3] Most consisted of uncomplicated cross-hatching (or lattice patterns) or random scratching. These motifs are often essentially identical from one seal to another, and consequently, the impressions they produced would have been virtually indistinguishable (cf. Sbonias 1995, 74–79).[4] Thus, although the seals themselves were likely worn on persons' bodies and thereby linked to individual corporealities, the seal impressions are seemingly incapable of signifying a specific sealer's social identity on their own. In the absence of a syntax of differentiated motifs, each of which

could indicate a particular identity, the signifying link between a given seal impression and a responsible human sealer must have been inferred from surrounding contextual sources, external to the impressed sealing itself. Aside from physical and positional cues (e.g., where in a building an impression was located, on what type of vessel, etc.), a fundamental source of information used to decipher a seal impression (and thereby isolate a responsible sealer's identity) likely included a firsthand knowledge of who possessed seals and in which areas and capacities they were active.

Seal use conducted through the early seals' undifferentiated motifs, which consequently relied heavily on personal knowledge of potential human sealers, was necessarily restricted in its scope. Most likely sealing communities involved a limited number of persons and a more or less discrete spatial area in which the community interacted and seal use pertaining to that community was performed. Within such settings, the use of unelaborated motifs fulfilled the perceived needs of the communities, the lack of differentiation posing no obstacle to the interactive processes enacted through the seals and impressions. For example, if seal use was employed at the household or multi-household level, perhaps only one figure therein had access to a seal, and thus—within the parameters of that community—could have been easily identified through an otherwise generic impression. Within such a context, complex information concerning the organization of persons' relatively defined powers could have been reflected in even a seemingly straightforward instance of seal use, such as a sealed/impressed vessel positioned in a pantry (e.g., who could form such an impressed sealing, who could break a seal and who could not, and how such freedoms might reflect notions of ownership, power, authority, gender, and respect between involved persons, at least in relation to certain classes of things). Conversely, if an object carrying a simple EM I—II impression traveled outside this limited social context, and especially if it moved beyond the local community, the ability of the generic motif to signify a *specific* identity within a broad corpus of seal possessors likely was lost, the impression instead relating a far less specific message (if still extremely important), such as that an item had been sealed by someone with access to a seal and had not been opened during travel.[5]

Alternatively, it is possible that the undifferentiated motifs suggest not that the area and number of persons constituting a sealing community were necessarily limited but that the social identities signified through seal impressions were remarkably unrestricted. In such a situation, the generic seal motifs would not necessarily have been used to signify an identity attached ultimately to a single corporeal human but to represent *any* seal possessor whose

movements were such that he could have plausibly produced the impression (i.e., it would have been enough to know that "a person with access to a seal" had created an impression). In this way, the social identity construed through (and for) the impression in the moment that a human encountered it would have been, in effect, shared by all persons possessing a seal engraved with the generic motif. Even if such was the case, we should remain aware that seal impressions signified social identity and not merely, say, the status of a vessel or its contents. Even if the latter was connoted in the signification, the seal impression's fundamental role as a text recording the situated event of a human impressing a seal necessitates a recognition of the impression's primary link to the notion of a relatively defined social position construed in a particular temporal/spatial/social context—in other words, to a social identity. Whether this social identity applied to one human or more is another question.[6]

Unfortunately, preserved seal impressions that we might use to reconstruct patterns of sphragistic seal use are extremely scarce from this early period (and, in fact, from all Prepalatial periods on Crete; see Pini 1990; Weingarten 1990; Vlasaki and Hallager 1995; Hallager 2000). Interestingly, four preserved EM I—II impressions that we do have were rendered with exceptional seals that were *not* engraved with cross-hatched motifs (Figure 5.2). Instead, these impressions carry geometric motifs that have close stylistic ties to Cycladic and mainland material; in some cases, either the parent seals or the impressions may have had their origins beyond Crete (for an impression from Myrtos [CMS V1.20], see Warren 1972, 40–41, 227nl34; from Trypiti, see Vasilakis 1989, 56, figure 7; and from Knossos [two, although the clay of one may be nonlocal], see Wilson 1984; Weingarten 1994, 171–75; for a discussion of links between this style and Cycladic and mainland traditions, see Wiencke 1981, 259; Sbonias 1995, 79–80; Krzyszkowska 2005, 61; Anderson 2009, 154–67). Of course we should not attempt to characterize EM I-II seal use from these few extant impressions (and the negative evidence of others). Yet, by providing a contemporary point of contrast, the distinctive motifs captured on these rare impressions do demonstrate just how *alike* the EM I-II cross-hatched motifs were to one another. Further, the extant impressions seem to indicate (again by contrast) that in this period, in the vast majority of instances, little effort was invested in exploring ways to differentiate seal motifs from one another; this appears not to have been considered necessary in seal design/use in this early phase.

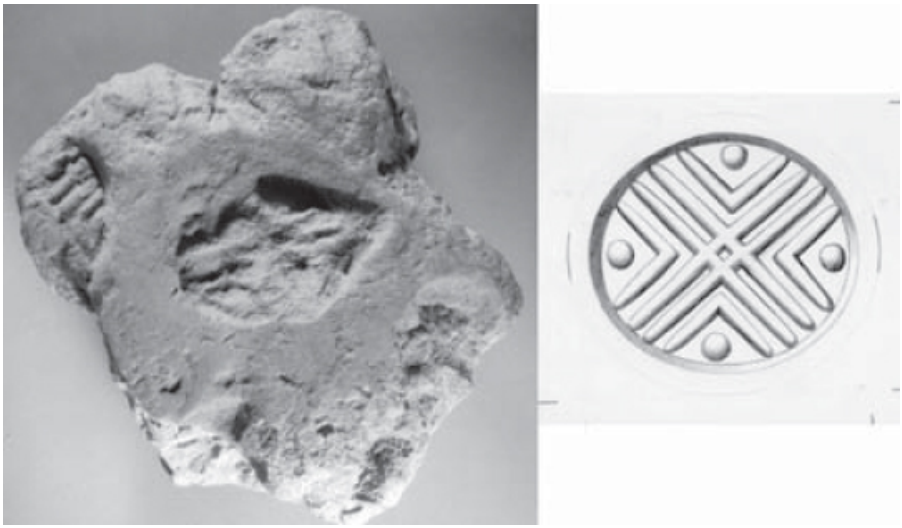


FIGURE 5.2. Impressions on an EM II sealing from Myrtos (photograph and drawing of impressed motif). Images adapted from *Corpus der Minoischen und Mykenischen Siegel V: Kleinere Griechische Sammlungen;* edited by I. Pini, 1975. Berlin: Mann. Number 20; not to scale.

Certain aspects of seal use described above pertain to all glyptic phases on Bronze Age Crete. For example, impressions' role as texts would have underlain all seal use as both the fundament of the objects' signification process and a basic level of security.[7] Further, information derived both directly from an impression itself (distinctive sensible attributes, visual, tactile, etc.) and indirectly from other sources (broader contextual details, prior personal knowledge of seal possessors) would always have been combined in the process of "reading" an impression. However, the balance among certain sources changed in different periods. The most dramatic moment of an alteration in the signification performed through seal use on Crete came in the transitional EM III–MM IA phase, directly preceding the period traditionally understood to have seen the emergence of palatial society on the island (MM IB).

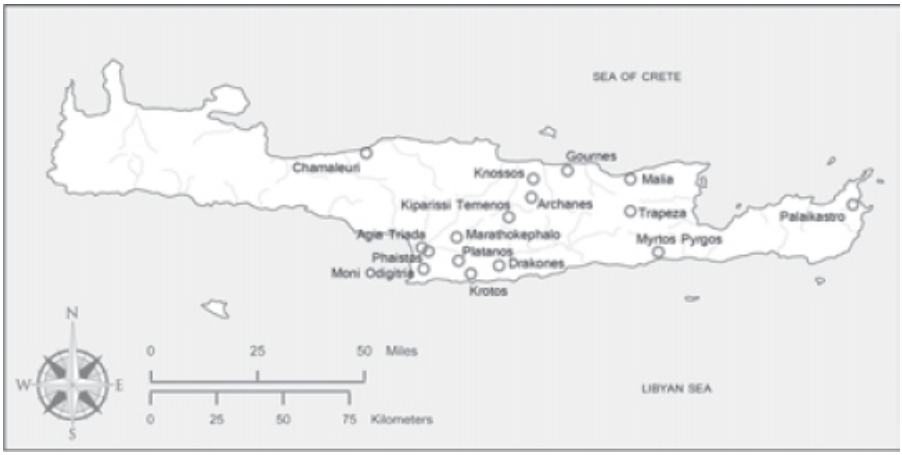


FIGURE 5.3. Sites where Parading Lions glyptic material has been found. Adapted from map created by Tom Elliott, copyright 2003, Ancient World Mapping Center.

The EM III–MM IA Parading Lions seal group fully exemplifies the crucial changes to seal design and use that took place in this period. As the first discrete stylistic/iconographic glyptic group represented across the island (Figure 5.3), the seals and their impressions newly presented a series of positive attributes through which they could be compared and contrasted with one another. To begin, the seals themselves had a highly recognizable typical appearance. Almost all were fashioned of imported hippopotamus ivory and carved into a stamp-cylinder form (Figure 5.4). The motifs engraved on the seals' two roughly circular faces were also readily identifiable as part of a common stylistic and symbolic tradition. The motifs located on the seals' obverse faces characteristically depicted lions, which were rendered in a limited variety of forms as part of several composition types. Meanwhile, the reverse faces were usually engraved with far less complicated motifs, often involving loops, spirals, or simple (frequently single) figures, such as a swastika or scorpion (see also Sbonias 1995; Yule 1980). The compositions involving lions (and occasionally other creatures, sometimes in combination, as in Figure 5.4) were often of a rotational nature, in which the beasts formed a figural ring. In some rarer cases, the lions are represented in other composition types, including linear and simple narrative arrangements, which are nevertheless clearly part of the Parading Lions macrostyle. However, despite this highly recognizable and deliberate participation in the same style, each known Parading Lions motif is unique and clearly distinguishable from all others (Figure 5.5).[8]

FIGURE 5.4. Examples of the EM III–MM IA Parading Lions group (photographs of seals and drawings of impressions). Images adapted from *Corpus der Minoischen und Mykenischen Siegel Band II, Iraklion Archäologisches Museum,* Teil I; edited by N. Platon, 1964. Berlin: Mann. Numbers 248 *(top)* and 250 *(bottom),* Platanos; not to scale.

FIGURE 5.5. A sample of motifs belonging to the EM III–MM IA Parading Lions group (drawings of impressions). Images adapted from *Corpus der Minoischen und Mykenischen Siegel Band II, Iraklion Archäologisches Museum,* Teil I; edited by N. Platon, 1964. Berlin: Mann. Numbers (L-R, T-B) 223a, 321a, 251a, 222a, and 312a. *Corpus der Minoischen und Mykenischen Siegel XII: Nordamerika,* I: New York, The Metropolitan Museum of Art; edited by V. Kenna, 1972. Berlin: Mann. Number 8a; images not to scale.

The important factor here is that the engraved seal face was now the venue of a new type of visual symbolic elaboration. Each Parading Lions motif was powerfully distinguished through its *particular* attributes (e.g., variables such as the form of engraved figures, division of the motif's field, specific organizational schemes, inclusion of other creatures/design elements, and variation in number of figures), yet simultaneously each was also self-consciously linked to other Parading Lions motifs through a common theme and highly recognizable macro-style.[9]

The development of differentiated seal motifs fundamentally altered much of the process by which a seal impression was deciphered. Each seal now presented a singular, distinguishable motif, or *seal-symbol,* which was replicated in new material forms in its impressions (Figure 5.6). In this way, a syntax of distinct signifying terms newly emerged (cf. Sbonias 1999, 36–39). The differentiated seal-symbols maintained their visual distinction and, thus, their ability to serve as signifiers of particular social identities even when distanced from social and spatial micro-contexts in which humans

were directly familiar with the seal owners and their activity patterns. Potentially distanced from such micro-contexts in the form of impressions on objects, a seal-symbol in effect represented a new "face" for the social identity construed as responsible for the impression, which stood as an alternative to the human face of the seal owner. Through this alternative face, another human could engage in a social interaction with the *particular* social identity responsible for the impression (making sense of and responding to the impression) in a context that was distanced from the corporeal human seal owner. In other words, the impressed seal-symbol presented an alternative distinct, tangible social presence that could persist as a particularized embodiment of a social identity across new distances.

FIGURE 5.6. An EM III–MM IA sealing from Khamaleuri carrying four impressions rendered by a Parading Lions seal (photograph and drawing of impressed motif). Images adapted from *Corpus der Minoischen und Mykenischen Siegel V: Kleinere Griechische Sammlungen,* Suppl. 3: *Neufunde aus Griechenland und Westliche Türkei;* edited by I. Pini, 2004. Mainz: P. von Zabern. Number 324; not to scale.

The balance between sources of information drawn upon when encountering an impression was thus altered, because the process of construing a social identity for the impression could now rely far less on personal knowledge of the human sealer and far more on the impressed motif. Although seal use in the preceding period had presupposed a personal knowledge of the corporeal human seal owner with which to differentiate an otherwise generic impressed motif, the new seal-symbols self-differentiated, each symbol providing internal differentiating attributes through which one could be distinguished from another. Naturally, even with these changes, an impression was still understood as a text recording the act of its own creation. To that extent, a person encountering an impression would have drawn upon

the various details combined in it (e.g., the formal details stemming from the engraved face of the source seal, the properties of the clay, and the physical and social context of the impression) to gain a sense of the particular circumstances (social, physical) under which it had been created by a human hand. In this way, an impression still presumed the role of a human sealer. Moreover, it likely took time for persons to recognize advantages in using differentiated motifs and to become familiar with interaction through them (and this may have been a varied and discontinuous process on the island). Yet the development of differentiated motifs provided the impression with the preconditions for a new independence, because the process of deciphering it no longer *required* linking it back to a known human. In other words, with the development of differentiated motifs, the situated process of deciphering a motif—that is, the situated construal of a particularized social identity for the impression—could become less a matter of determining whose human hand had created the impression and more a matter of recognizing who the impressed motif "said" that it was. On a fundamental level, the formal differentiation of the motif provided for its social differentiation and independence.

Rendered in the form of differentiated movable symbols, social identity, along with the enactment of human will recorded in seal impressions, could be literally and systematically distanced from the corporeal human. Practically and symbolically, interregional interaction thus emerged as a supported possibility as temporal, spatial, and, most importantly, sociocultural parameters of interactions were fundamentally expanded.

THE PARADING LIONS SEALS AS PROMISCUOUS OBJECTS

The use of differentiated engraved seal motifs is perhaps the most clearly notable divergence of the Parading Lions seals from the earlier EM I–II seal types. However, equally significant is the incorporation of imported hippopotamus ivory and lion imagery as part of a common glyptic style and iconography. Hippopotamus ivory was imported to Crete from Egypt or the Levant (see Krzyszkowska 1988; Kolska Horwitz and Tchernov 1990). Procurement thus involved extensive sea travel, conducted by Cretans journeying overseas or by persons visiting the island. In fashioning the seals, the segments of ivory utilized were modified only minimally, often being left in cylindrical sections that preserved the shape of incisors (Krzyszkowska 1989, 113–16). This unadulterated form suggests that the raw material may have been considered a focus of the object's aesthetic and symbolic

value and was not simply a fine medium for carving endeavors.

Meanwhile, the intaglio faces of the seals were often engraved with intricate motifs that typically involved lions. Lions, like hippopotami, were not present on Crete and thus their depiction on the Parading Lions seals necessitates consideration of the paths through which Cretan seal carvers were exposed to the notion of the beast. Two principal possibilities exist. Either the seal carvers traveled or came from abroad (specifically, from regions where the lion was familiar, such as Egypt or the Near East, or perhaps the distant Greek mainland; Ballintijn 1995), or more likely, the carvers learned of the lion indirectly. In the latter scenario, the lion's form was described to Cretan seal artisans by persons who had seen the beasts or images of them abroad, or the artisans could have used imported objects carrying renderings of lions as models. In my opinion, the latter possibility is the most probable. Foreign objects (including potentially several seals; see Aruz 1995, 1–12) are not uncommon on Crete in this period (following a first wave of foreign exchange attested in EM II levels), and objects were a more viable means of disseminating a consistent image to carvers located across the island, as opposed to various subjective descriptions. However, the particular forms of lions rendered on the Parading Lions seals find no precise parallels in the glyptic traditions of the Near East or Egypt. Thus, although the image of the lion was certainly initially imported, it came to have a distinctive existence on Crete.

The use of imported hippopotamus ivory and lion imagery is especially fascinating given that the Parading Lions seals stood as an innovative symbolic object type, the meaning of which was directly intertwined with the forging of an unprecedented and distinctly Cretan material identity. As such, within the transitional landscape of late Prepalatial Crete, the Parading Lions seals can, on the one hand, be directly compared to other examples of new socio-symbolic forms of material culture evidenced in multiple regions around the island, such as certain fine feasting wares, architectural forms, and so forth. Together with the seals, these may represent the first identifiable phase of a deliberately common transregional symbolic material culture, shared by social actors positioned in various regions of the island that otherwise demonstrate no formal sociopolitical ties. On the other hand, given that the Parading Lions seals were explicitly "objects of identity," the motivation to prominently incorporate foreign elements assumes an especially provocative significance.

With respect to the material of the Parading Lions seals, seal carvers, perhaps led by seal consumers, almost certainly would have chosen ivory as a desirable material because it was relatively scarce

on the island. Further, the distance and challenges involved in obtaining the material were, on some level, likely involved in its perceived value. However, the degree of knowledge that a given person would have had of the ivory's procurement path could have varied widely, and so too the specific significance of its scarcity and non-Cretan origins. In the transitional EM–MM period, persons living in most areas of Crete, including those in the most inland regions, likely had some familiarity with the sea and the notion of boat travel; the sea is less than twenty miles (as the crow flies) from any location on the island. Even so, few Cretans likely would have engaged in sea journeys to lands beyond Crete. Knowledge of and contact with peoples and things from such extra-island locales thus would have involved various indirect paths and relationships. The particularities of the interactive links through which such knowledge and contact were realized would have informed the value attached to items such as the ivory. Persons interacting directly with foreign tradespersons could have heard narratives concerning the processes by which the material was obtained overseas or even the symbolic or practical qualities associated with it there. Such notions perhaps were incorporated into the meanings attached to the material on the island. Meanwhile, persons encountering the ivory further down the line on Crete likely were less privy to such information concerning the ivory's origins, or the information may have been altered and augmented on its Cretan trajectory (cf. Carter's [1998] discussion of Cycladic obsidian importation and consumption on EM Crete). Different ports, different traders, different personalities, and incidental realities would have distinguished the path by which the ivory reached one person from that by which it reached another. In this way, the social interactions through which the material was obtained, and the hands through which it passed, informed the semantic content linked to the ivory by persons along the way.

Christopher Gosden describes as "promiscuous" certain artifacts that present a "nexus" of elements from "many different places" and "many parts of the object world" (Gosden 2005, 199, 206). This notion forms part of his larger thesis, in which objects are understood to stand not only as a material venue for human fabrication but also as distinct entities that have the potential to influence, enable, and even place "demands" on human action (Gosden 2005, 208). In other words, he asserts that "things create people" every bit as much as people create them (Gosden 2005, 194). Thus, in his discussion of material culture developed through various types and levels of intercultural interaction, he suggests that we consider the objects not merely as hybrid artifacts that melded various forms and materials but also for the very real experiential effects that such pieces—and the

changes they constitute—had on human actions. It is in this context that his consideration of objects' promiscuity arises, the term lending agency to the objects and thereby shifting their role from passive to active.

Annette Weiner's discussion of "inalienable objects" (1992) can be seen to coincide interestingly with Gosden's discussion in this area. Weiner considers how the history of some objects can be the central component of their value. Such objects are "symbolic repositories of genealogies and historical events; their unique, subjective identity gives them absolute value, placing them above the exchangeability of one thing for another" (Weiner 1992, 33). Irreplaceable and unique, an inalienable object thus represents to a human a biography of associations and meanings that renders its value powerfully subjective. In this regard, both the object's history itself and the significance of elements encountered therein would vary according to the situated perspective of the human valuer. In addition to the fact that different persons potentially encounter an object at different points and places in its path, so would they approach it—and its perceived history—with different knowledges, purposes, and desires. Through the lens of various human experiences, sensations, and interactions, the significance of an object's past could transform subtly or radically. Thus, people can and do feel and think about the material and biographical substance of things—it is part of what Gosden calls the "basic alchemy of human being"—but they do so in powerfully diverse ways (Gosden 2005, 209).

If we consider the hippopotamus ivory used for the Parading Lions seals in this light, it becomes clear that reductive categorizations such as "exotica" (how the ivory is typically labeled) fail to acknowledge the rich variety of significances that the material potentially carried on EM-MM Crete. We should instead consider that understandings of the raw material's origins might have ranged from a detailed knowledge of the circumstances of its procurement to near-mythical notions of unseen lands and beasts. In terms of the former, one can imagine, for example, that the particulars of the oft-depicted Egyptian hippopotamus hunt may have been recounted to Cretans, thereby relating practical and symbolic aspects of the foreign sport and the ivory garnered therewith (see Säve-Söderbergh 1953). On the other hand, many Cretans likely had no access to information concerning the extra-Cretan realities or symbolisms of the material. For these persons, the ivory would have developed new meanings particular to its existence on Crete, which incorporated various versions of, and levels of engagement with, its overseas pedigree (cf. Gosden 2005, 207).

It has been suggested by several scholars that foreign material consumed on Crete in the Prepalatial period may have carried an aura of "distance" that lent symbolic power to emerging elites possessing it (e.g., Colburn 2008; Schoep 2006). These discussions have drawn upon the work of Mary Helms, who posits that notions of distance sometimes have a powerful "cosmological" or "supernatural" component, which can be associated with persons and things (Helms 1993, 7). I find it highly probable that foreign material on Prepalatial Crete was imbued with meaning of this sort, at least in part. Objects or material whose histories were understood to have originated beyond the shores of Crete could have been associated with a sense of mystery, movement, and accomplishment, as a part of the perceived biographies I have discussed. At the same time, in light of Gosden's and Weiner's work, it is important to further consider how more specific experiences and values would have developed around the seals as new composite Cretan objects (cf. Gosden 2005, 209). These would have involved notions of the objects' pasts but also a person's direct sense of their material particularities and embedded significances within the Cretan "present."

Hence, we should understand the foreign elements of the Parading Lions group as having offered unprecedented material and symbolic terms to the inhabitants of Crete. These at once marked a break with previous seal traditions, brought new sensory experiences to the Cretan hand, and provided the potential to establish a new body of symbols (and signified notions) on the island. We have seen that by prominently incorporating both hippopotamusivory and lion imagery —tactile, visual, and conceptual novelties—the Parading Lions seals intertwined two sources of distinctly extra-Cretan material biographies into a single object type. Of yet greater importance, however, is the fact that the newness marking the use of lion imagery and ivory for seals on Crete coincided with other innovative aspects of the Parading Lions group, including the development of differentiated engraved motifs discussed above and the establishment of a distinct glyptic style and iconography. These aspects taken together provided for a fundamentally new type of object with pioneering possibilities in the realm of symbolic social interaction; the objects' values would have been directly related to the experience of these interactive possibilities. Taken in this light, the seals' status as promiscuous objects arises not merely from their joining of diverse elements but also from their provocative construction of and participation in something new and unprecedented through such combination. The "effect" of the objects in many senses would have been more significant than their variable meanings (cf. Gosden 2005, 208).

The combination of innovative attributes presented in the Parading

Lions seals thus constituted, in part, a new manner of transregional interest within the Cretan population. The objects were the result of costly procurement and manufacturing efforts motivated by this interest and directed by a fundamentally new experience of seals' potential role in interactive processes. Clearly seen as far more than utilitarian pieces with their scope limited to local social spheres, these seals instead were rich material venues through which social identities could be connected over extended distances. The Parading Lions seals and impressions performed these connections on two interrelated levels. First, they provided differentiated engraved motifs, a syntax of signs, which could successfully extend the signification of social identities beyond local sealing communities. Second, they presented a new, shared style and iconography that linked seal possessors in diverse Cretan locales as consumers of and participants in a common symbolic material culture.

The Parading Lions seals thus offer a clear example of how the Cretan EM–MM population used material culture to "interfere" (cf. Wobst 2000) in the processes of their lived actions. The fabrication of the seals (physical and symbolic) carried with it the deliberate construction of human identities and relationships, signified by and through the objects. Alongside this explicit process of persons' self-creation, we must also appreciate that implicitly a critical aspect of the identities presented by the seals was their fundamental and necessary *distinction from* the humans who used them. More than simply signifiers, the seals and especially their manifest impressions had to stand as independent embodiments of their own social identities, separate from those of the humans that they served. The semiotic developments of the Parading Lions group provided the practical means for this separation (over time and space), but a conceptual distinction would also have been involved. In other words, for the extraordinary changes in sociocultural interaction newly provided for by the semiotic developments of the Parading Lions group to be realized, people needed to conceive of the seals and impressions in new ways, granting them the status of true, distinct alternatives to corporeal humans in interactive processes. As such, the objects effectively had to possess their own social identities.

ACTION-BASED SOCIAL IDENTITIES

To consider further how the Parading Lions seals and impressions were experienced as embodying unique, independent interactive identities, I will briefly draw upon a notion of value developed by Nancy Munn through her ethnographic work in Melanesia. Munn has

considered the manner in which value, including the value of a material object, can be constituted by human actions and interactions (see Munn 1992; cf. Strathern 1990; see also Graeber 2001). Munn's work has in particular explored the dynamics of the kula ring, in which armbands and necklaces circulate among persons living on numerous islands through a complex system of ritual exchange. Despite the fact that kula has become an extremely popular source for theoretical analogy in studies ranging from the social sciences to humanities, Munn's discussion of value also remains one of the most provocative. Munn explains that value can be generated and thereby constituted in action, and as a result a given act, or an entity or object produced or involved in an act, can stand as both the creation and the signification of a value (i.e., value of a "particular/substantive variety") (Munn 1992, 7–9, 121, 272–73). Working from this perspective, we can understand the value of the Parading Lions impressions as having potentially been a matter of the actions of which they were understood to have been a part and thus reflected. These actions included both the moment of intimate relationship with a human sealer at the point of the impression's creation and the encounter with another human in the moment that the impression was deciphered and read as a text. Yet more broadly and distinctively, the impression's value arose from its own unique movement, in which it acted between the other two acts, thereby relating them.

The Parading Lions objects had distinct action trajectories, which at points coincided with humans but were fundamentally distinct from them. Further, these trajectories were definitional to the objects' social existences. This is a significantly different understanding of the seals and impressions than those that posit the objects merely as extensions of human actors or signifiers whose agency and identity were essentially the same as those of the human possessors. In the alternative approach I propose here, the objects' social identities are understood to have incorporated values arising from their interactions with humans but must be understood as having necessarily extended beyond these interactions and any particular relationship to a human. In this way, the social identity of a manifest Parading Lions impression pertained not to a single human but to its own unique social position and potential, wherewith it was an independent actor capable of participating in actions with multiple persons.

This notion also applies to the seals themselves. Returning to Weiner's discussion of an object's ability to retain a history, we can see that the action trajectories of the engraved seals could have included the movement and exchanges through which the foreign components of the seals traveled to and across Crete, accumulating physical marks and narrative associations alike. Such movements and

interactions or, more importantly, recounted and imagined versions thereof—even if they deviated from the actual realities of the materials' paths–could have contributed to a seal's value as understood by a person or group at any given time, embedded within a particular context (see Hoskins's discussion [2006, 78–81] of two types of "biographical" analysis). Likewise, a seal could have been seen to reflect its involvement in actions with multiple humans over generations, thereby building its particular value as an heirloom (cf. Weiner's discussion of ancestral passage of items [1992, 105–9]; also Flouda [2010, 80] on multi-generational "collective" agency through heirloom seals). Such action-based values directly informed the seal's character as a material participant in interactive processes and thus contributed to its effective social identity.

Approaching the Parading Lions seals and impressions in terms of their own unique movements and interactions necessarily alters our understanding of the contexts from which they derived their value, identity, and agency. Primary emphasis comes to the immediate situations of people's direct engagements with the pieces and shifts away from the realm of static represented entities and ideas. This approach shares a general perspective with Tim Ingold's reconsideration of writing (2000, 401–5). Ingold compellingly argues for understanding writing not merely as a technology of mechanical performance, in which predetermined representational forms and signified values are simply reproduced and transcribed, but as a "continually responsive" skill practiced by embodied people in specific and variable times and places with particular materials and social and physical realities. This perspective draws attention to the lived dynamics of writing, to the actions, things, and contextual environments actually experienced by a situated person. Thus, Ingold argues that the written text "is not prefigured as a mental construction which the writing hand merely serves to transcribe onto a surface" (2000, 403). Instead, writing, as a skill, comprises "properties of the whole system of relations constituted by presence of the practitioner in his or her environment" (2000, 401). In other words, writing is an embedded activity, involving the concurrent and inter-"woven" material, environmental, and bodily dynamics of the particular moment in which it takes place.

Through the foregoing discussion, the position of the Parading Lions seals and impressions within social interactions has been reconceived along similar lines. We have moved away from seeing them simply as tools of signification—representational devices that merely pointed back to an absent human and context to locate their signified identity and agency—and instead shifted focus to the fluidly variable "present" contexts in which people engaged with the objects,

forming, feeling, imagining, and responding to their unique material social presences (on archaeologies of corporeal experience, see Hamilakis, Pluciennik, and Tarlow 2002, including excellent discussions of Aegean Bronze Age material). Hence, I suggest that subtending the explicit representational function of the seals and impressions (operating as signifiers and texts) there in fact would have been something quite different at play arising from people's actual experience with the objects. The particular, immediate social character of each would have been born of the variable dimensions of material, memory, bodily sensation, and social and cultural circumstances in which it was embedded. Even notions of a seal's past, which could have been an important element of its perceived identity and value, would have been subjectively construed in its particular "present." I am not arguing that seal use did not explicitly involve representational notions linking the pieces to humans; indeed, it almost certainly did. Instead, I contend that people implicitly experienced the seals and impressions as having identities and agencies that arose from their independent, particular material existences in the lived social world.

THE REALIZATION/MATERIALIZATION OF THE OBJECTS' AGENTIVE IDENTITIES

Humans engaged with the Parading Lions seals and impressions in embodied physical and imagined interactions that were grounded in the ever-momentary lived world. In the course of such interactions, the objects had effects on the feeling bodies/minds of people, influencing their actions and ideas through sensory dialogues. We should remain aware that these interactions involved real materials, with particular attributes, surfaces, and potentials (Ingold 2007). People's direct experiences with the seals and impressions did not merely subtend the conceptual statuses conveyed to the pieces as embodiments of identity but, in a very definite and particularized sense, shaped those statuses. In these contexts, the agencies of both humans and materials were in play as identities for both took form.

This intersubjective play is illustrated if we consider the moment in which a seal impression is made (Figure 5.7). Imagine that the tied-up closure of a jar is to be sealed shut. The person takes a lump of moist clay and fixes it over the cords that wrap around the stopper and the jar's mouth. The size and shape of the vessel's mouth, the alignment of the stopper with the mouth's edge, the specific manner in which the

cords wind around the jar, and the precise positioning of the clay clump all contribute to the ultimate form of the impression. At this point, the person takes his seal and pushes it into the clay. The nature of the clay is extremely important. Is it coarsely or finely grained? Is it too wet or dry to properly capture and retain the details of the impressed motif or in an ideally receptive middling state? Is the lump thick enough to hold a deep impression, or is it thin, so that the seal strikes against the objects underlying the clay? The person is also a variable in this process. There is a certain lack of control, a certain incertitude born of contingency involved in the creation of an impression. Here the agency of the seal and the lump of clay is apparent. As the human holds and presses his seal into the clay, he sees only the seal—the smooth, bulky ivory object—and *not* the surfaces being pushed against one another beneath. He does not know what is happening there—indeed, what is taking form on that critical interactive plane is now being reckoned by the engraved crevices of the seal face and the textured uneven surface of the clay lump attached to the vessel. Subsequently, as the sealer pulls the seal back, the newly formed impression is revealed. The qualities of the impression reflect the interaction of the human and materials with one another, their agencies encountering and intermingling into a particular physical thing. The sealer might be frustrated with the resultant form of the impression—perhaps a lack of humidity cracks the clay lump, the legs of one lion do not come out clearly, or a coarse inclusion has obliterated the form of another's head. The impression is a compromise, a negotiation. As the sealer evaluates the fresh impression, he imagines the moment of encounter between it and another human. That human will also be engaging with the particular material reality of this piece of clay, empowering it with the status of an authentic embodiment of a social identity.

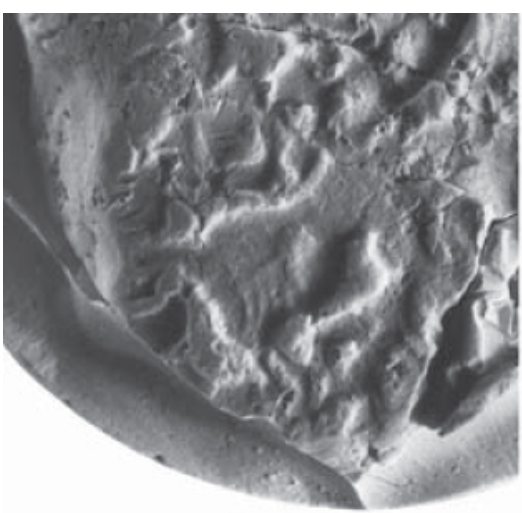


FIGURE 5.7. An EM III jar stopper from Knossos impressed with a Parading Lions seal (the stopper also carried another impression). Images adapted from *Corpus der Minoischen und Mykenischen Siegel II: Iraklion Archäologisches Museum*, 8: *Die Siegelabdrücke von Knossos unter Einbeziehung von Funden aus anderen Museum;* edited by M. Gill, W Müller, and I. Pini, 2002. Berlin: Mann. Number 6; not to scale.

When approaching the social and cultural dimensions of a human sealer's experiential engagement with these materials, it is useful to draw on Thomas Csordas's notion of "somatic attention" (Csordas 1993). For Csordas, following Merleau-Ponty (2008), the sensuous human body is the grounds for human engagement in the cultural world (Csordas 1993, 135). He argues that somatic attention describes how humans experience the intersubjective cultural world and, as a part of this, how they experience both their own bodies and the embodied social other:

> Somatic modes of attention are culturally elaborated ways of attending to and with one's body in surroundings that include the embodied presence of others . . . Because attention implies both sensory engagement and an object, we must emphasize that our working definition refers both to attending "with" and attending "to" the body. To a certain extent it must be both. To attend to a bodily sensation is not to attend to the body as an isolated object, but to attend to the body's situation in the world. The sensation engages something in the world because the body is "always already in the world" . . . Attention to a bodily sensation can thus become a mode of attending to the intersubjective milieu that give rise to that sensation. Thus, one is paying attention with one's body. (Csordas 1993, 138–39)

Working with Csordas's concept of somatic attention, we see that the human sealer participates in the intersubjective world through a culturally patterned (Csordas 1993, 140—41) yet at the same time highly particular and momentary instance of sensory engagement. In the sealer's *immediate* context the intersubjective world may not contain another human (although it could), but the sealer nevertheless is acting, experiencing, imagining, and indeed shaping both her own and another's engagement in the intersubjective realm through her interaction with particular materials. These materials cannot be reduced to a position as mere tools of interaction. As pieces of the same material world of which the humans are likewise elements, the materials—the clay, the ivory seal, and so forth—have active presences and powerful agencies that are fully part of the intersubjective experience. Indeed, it is these nonhuman materialities that connect the embodied experience of one human to that of

another. The social identity that the impression embodies thus is defined by its movements and interactions within and between multiple persons' hands, as a distinct material sociocultural presence.

CONCLUSION

Object-based social analyses, such as the one offered here, are susceptible to particular problems. As David Graeber writes in a critique of Arjun Appadurai's hugely popular book *The Social Life of Things* (1999), "Appadurai . . . ends up writing as if all exchanges are simply about *things,* and have nothing to do with making, maintaining, or severing social relationships" (Graeber 2001, 32; emphasis in original). Indeed, this is a risk whenever one follows objects and not people. I have, however, attempted here to consider objects in terms of their equal dialogue with humans and human actions, and not to their exclusion. The seals and impressions interacted with humans and things alike in processes that reshaped interaction on the island. In particular, this analysis suggests that a critical locus of change in the EM–MM phase was constituted by a dynamic interaction between humans and an emergent transregional symbolic material culture, which included the Parading Lions seals but also comprised other objects, such as ceramic feasting wares (see Haggis 2007; Knappett 1999). Further, it appears that developments on the formal sociopolitical level may have followed those occurring in this human/object symbolic realm (cf. discussions in Cherry 1987; Knappett 1999; and Manning 1995 concerning the role of ideology and symbolic culture in the Protopalatial period).

Even within the new corpus of symbolic material culture, the Parading Lions objects were unique in two significant respects: they stood explicitly as objects linked to social identity and as a means of interaction. As such, the seals and impressions represent, on one level, the conscious fabrication of messages concerning the humans who made and used them. Yet we have seen that the objects simultaneously enjoyed a fundamental distinction from these humans on both a practical and a conceptual level. People would have experienced them as distinct material social presences, which embodied values and agentive identities of their own, constituted by a nexus of their unique material qualities, symbolic attributes, and interactive trajectories. It was this independence that provided for the objects' powerful potential in social processes. The Parading Lions style stood as something with which human actors associated themselves, a movement in which people participated. The objects thus uniquely engaged members of the Cretan population, both as

something that persons actively forged and as something that confronted them as an extensive independent phenomenon.

In this position, the Parading Lions seals and impressions emerged as objects that could justify human interaction. Possessing or using a Parading Lions seal could have legitimized one's involvement in a social transaction, even in a situation in which the humans involved did not have a personal knowledge of one another (e.g., an exchange of sealed goods between two parties over a significant distance). The seals and impressions thus were more than tools of representation. They embodied a new way of knowing social actors, contributing to a new means and mode of social knowledge. In this way they not only facilitated but in fact directed social relationships, and in so doing—to quote Gosden—they guided persons to "new sensibilities and forms of relatedness" (Gosden 2005, 208).

NOTES

1. This follows Eco's discussion of how imprints can function as texts (Eco 1979, 222).

2. I discuss at length elsewhere the importance of the seal's position as an object associated with (and seen on) the body of an active human (Anderson 2009, forthcoming). Maria Relaki has also suggested that the public performance of seal use could have been extremely important in Prepalatial Crete (Relaki 2009).

3. This is the predominant general form of early seals but exceptional types exist, including, notably, zoomorphic/amuletic examples (see Anderson 2009, 141–81; Sbonias 1995, 73–99; Yule 1980).

4. It naturally remains possible that fine differences in the rendering of some crosshatched motifs, although seemingly inconsequential or even indiscernible today, were in fact meaningful distinctions to persons interacting with the seals/impressions in EM I–II Crete. It is, in any case, remarkable and extremely significant that the same design—crosshatched plain lines—which certainly does not lend itself to recognizable variations, was employed on seal after seal in this phase.

5. Naturally, even the most generic seal impression could be linked to a specific identity if accompanied by, for example, an oral message explaining that the impressed sealing had been rendered by a particular person. However, in such a case, the message relating the specific identification would have been carried not by the impression but by the spoken words describing it.

6. As these possibilities make clear, it is not that notions of social identity, power, and access were uncomplicated in this period, even if the seal motifs were. Hence, although I indicate the constraints on the role of the generically cross-hatched EM I–II seals and impressions within processes of identity signification and construal, I am not commenting on the nature of identity politics at play in these social groups more broadly (including actions and ideas that could have been contextually connected with seal use).

7. Even if a signified social identity was shared among multiple persons, the implication that a seal impression could be linked securely to an actual source object, held and used by a human, would have crucially permitted the impression to be understood as signifying a given social identity and an authentic act (i.e., as carrying a given message with particular implications concerning the social position and deliberation behind an impression and its creation, even if that message was extremely broad, such as "someone with access to a seal has deemed it preferable to close this").

8. It is difficult to attribute to mere accident the rich intra-stylistic diversity of the Parading Lions motifs. A strong indication that the fine-level differences among the Parading Lions motifs were intentional and/or meaningful arises if we compare these motifs with another part of the seals. As discussed above, most of the Parading Lions seals were bifacial, and often the second face carried a motif that *could* be shared with other seals in the group (i.e., some "second face" motifs are repeated between Parading Lions seals). This demonstrates that seal carvers rendering these seals knew how to achieve identicalness *when that was their intention.*

9. Concerning this macro-style, that we also have evidence of other styles of seals in use contemporaneously with the Parading Lions group both demonstrates the discreteness of the Parading Lions group (i.e., that seals of the group were clearly and deliberately distinguishable from other styles of seals in circulation while at the same time were markedly similar to one another) and strongly suggests, given this conscious dissimilarity from other styles of seals, that the distinctive style/iconography shared among the Parading Lions seals was meaningful (i.e., that the Parading Lions seals' distance from other seals and closeness to one another were not only intentional but significant). Evidence of other glyptic styles also in use during the late Prepalatial period includes, for example, an impressed sealing carrying a complex linear motif from Psathi in western Crete (Hallager 2000, 98, figure 1) and two impressions from Khamaleuri, where we also have impressions rendered with a Parading Lions seal (Vlasaki and Hallager 1995, CMS VS.3.323, 324, 325). As discussed

above, *within* the parameters of the shared Parading Lions macro-style, each particular motif was unique.

SIX

Performance, Presence, and Genre in Maya Hieroglyphs

Michael D. Carrasco

This chapter examines the objecthood of Maya hieroglyphic writing as well as the discourse about writing in hieroglyphic narratives. Two of my specific goals are to advance a genre-based approach to the study of Maya writing and to augment interpretations that have traditionally privileged oral performance in their understanding of the role of writing in Maya society. To this end, I examine texts from the vantage points of genre, media, and performance to suggest that the presence of text was an important part of an inscribed object's meaning and that the agentive power of a text comes just as much from its embodiment and presence as it does from its recitation. I suggest that writing's presence, its objecthood, realized in the media (architecture, stone monuments, ceramics, books) that transmit it to its audience, is itself meaningful apart from its semantic content or performance (see Chartier 1995, 1).

PERFORMANCE

To date, performance, defined both in the sense of a literal performance and as a particular set of theoretical concerns (Bauman 1972, 1977; Hymes 1975; Inomata and Coben 2006; Monaghan 1990), has been the main theoretical lens through which writing and its presence on surviving objects have been understood (Houston 1994; Houston and Stuart 1992; Houston and Taube 2000; Houston, Stuart, and Taube 2006; Hull 2003, 317). Performance has been a useful concept in the interpretive toolbox of Maya scholars. From assigning meaning to architecture and sculptural programs (see Guernsey 2006; Reese 1996, 97) to understanding the function of calligraphic monuments, it has laid a path to meaning that transcends iconographic analysis or the tabulation of historical data in glyphic narratives. Performance has enabled scholars of Maya art and writing

to construct theories of how epigraphs and the objects that preserve them were used and to attempt to unravel the complex and dynamic relationship between text and the reader or audience.[1]

Following this focus on performance, Maya epigraphers, although acknowledging that most texts possessed some degree of narrative integrity (Hull 2003, 26), have seen inscriptions as relying on oral performance to enact their communicative power and flesh out their narrative content (Houston 1994; Houston and Stuart 1992; Houston and Taube 2000; Hull 2003, 317). Under this view, glyphic inscriptions were skeletal texts that would have been elaborated on during their recitation. That is, their agency as cultural artifacts should be understood largely in terms of their reading to a hypothesized ancient audience. For example, Stephen D. Houston and David Stuart (1992, 590—91) have argued that the Maya script "most likely functioned within a system of 'recitation literacy,' in which writing served alongside an oral tradition that played a crucial role in fleshing out the schematic messages transmitted by the hieroglyphs." In addition, Houston and Karl A. Taube (2000, 263) have claimed that

> there is persuasive evidence that most script, regardless of geographical zone, was intended to be read aloud, . . . a point reinforced by the occasional appearance of first- or second-person references and quotative particles in Classic Maya script . . . This was no less true of the ancient Mediterranean, where Eric Havelock and others identified the ubiquity of "recitation literacy," involving oral delivery and public performance (Houston 1994, 30). What this means is that Mesoamerican writing was not so much an inert or passive record, but a device thought to "speak" or "sing" through vocal readings or performance. As a form of communication, writing was inseparably bonded to the language that it recorded. The view that script was an abstract, isolable text was most likely unthinkable, since, to quote Sennett [1994, 43] on ancient Greek writing, the "reader would have thought he heard the voices of real people speaking even on the page, and to revise a written text was like interrupting someone talking."

The aforementioned studies epitomized in this quotation have been extremely valuable in highlighting the importance of performance, performative acts, and the multi-sensorial context of much of Maya visual and verbal art, even if one might disagree or believe the evidence is lacking to support some of the specific claims made in this passage—the reading habits of ancient Greeks, even if Sennett's views are to be accepted (see Chartier 1995, 15—16), tell us little about those of the Maya. Acknowledging the important role of textual performance along the lines John Monaghan (1990, 1994) has argued

for the Mixtec codices has placed Maya writing within the larger context of other pre- and early modern traditions where reading was often a public affair (Florida 1995, 10—14; Hull 2003; Ong 1982) and advanced an understanding of Maya writing centered on the idea of recitation literacy, wherein an orator would have recited a text to spectators (Houston 1994, 30).

Public performance of texts had a central social role in societies whose populations were largely illiterate or semiliterate or in which books and other texts were largely unavailable. Nevertheless, literature on the function of Maya texts leads one to believe that the existing corpus of inscriptions, primarily on stone, ceramics, and other durable surfaces, often associated with architecture and complex iconography, functioned primarily as scores for verbal performance (Kubler 1973, 162; Monaghan 1990; also see King 1988, 1990). That pre-Columbian books were read is a compelling argument for Mixtec and other central Mexican codices and coordinates well with the documented use of books in ethnohistoric sources and in ancient depictions of codical use. Maya books (Figures 6.1 and 6.2) were likely used in similar ways, although in this case the script allowed for the precise recording of language. At the dawn of the Conquest, Bishop Diego de Landa observed in the context of rituals preformed during the month of Uo that

> [t]he [priests] in their finery gathered in the ruler's house. First, as they were wont to do, they cast out the devil, and then they took out their books and spread them out on fresh leaves which they had [there] for that purpose, and invoking with their prayers and devotions an idol which they called Cinchau-Izamna [Kinich Ahau Itzamna], who, they said, was the first priest, they offered him their gifts and presents and burned to him with the new fire their pellets of incense. Meanwhile, they dissolved in a vase a little of their verdigris [Maya blue paint?] with virgin water, brought, they said[,] from parts of the forest where no woman should have set foot, and with it they anointed the boards of the books to cleanse them. This done, the wisest of the priests opened a book and looked at the prognostics for that year, and declared them to those present and preached to them a little, recommending the remedies [against the evils forecast]. (Thompson 1972, 7)

Apart from the four known Maya codices, was the corpus of ancient inscriptions primarily intended for performance in a manner similar to the books of which Landa speaks?

I agree that many ancient texts could have been read and that the ethnohistoric instances of priests reading from indigenous books present compelling evidence for the oral performance of certain texts

such as books (Boone 2000; Monaghan 1990; Thompson 1972, 19). However, if all writing is considered through this interpretive model, one might imagine that after the trumpets and drums went silent and the ritual or dance ceased, the texts receded into ornate decorative programs, waiting until the next reading to be empowered again. But did monuments, buildings, and, most important to the topic at hand, texts cease to have meaning and force of presence without the performances known to occur in the built environments and landscapes that they created? Did writing exist primarily for its performance? Moreover, if these questions are answered in the negative, as they surely must be given the great investment of resources and artistry in the production of writing, what were hieroglyphic texts' other functions?

FIGURE 6.1. K1196. Codex-style vessel depicting two scenes of an old god lecturing to pupils (photograph by Justin Kerr, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

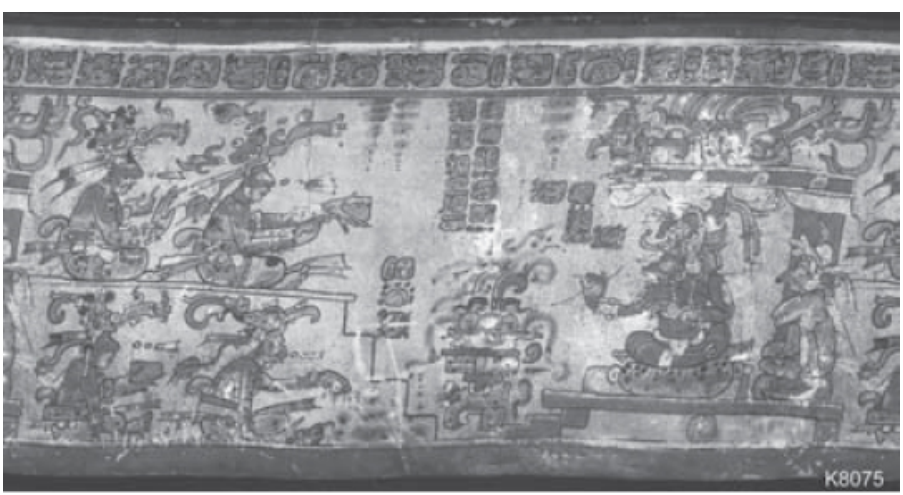


FIGURE 6.2. K8075. Classic period cylindrical vessel depicting deities making offerings to a codex (photograph by Justin Kerr, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

To accept the majority of inscriptional narratives as skeletal templates or intended primarily for public recitation ignores the great

differences in genre between books and the extent corpus of inscriptions, as well as the glottographic nature of the Maya script when compared with the largely semasiographic texts of central Mexican codices. The notion that a text is somehow reliant on verbal performance overlooks this difference in genre as well as the expressive power and presence of calligraphic monuments, the symbolic value of writing, and the media that present it, as well as its relationship with associated imagery and the act of writing.[2]

GENRES IN MAYA INSCRIPTIONS

Part of the confusion that surrounds issues of performance, presence, and the use and meaning of writing arises from a lack of clearly defined ancient genres. Without an understanding of the role of specific genres and the media to which they are at times linked, there is the danger of collapsing the narratives recorded in books with those presented on ceramics, stone monuments, and other objects into a single category of writing, and in turn a single kind of language—a problem not limited to the study of Mesoamerican inscriptions (see Harrist 2008, 22). Once Maya texts are thought of as a single category it is easy to analyze the category as opposed to the individual genres and the particular media that present it. The erosion of inscriptional context is intensified when drawings of texts are the primary mode through which they are studied. Modern line drawings clarify the details but obscure the broader contextual issues that inscribed monuments always present. Epigraphers of other traditions, such as the Romanist Lawrence Keppie (1991, 11), Sinologist Robert E. Harrist (2008, 18), and Zapotec specialist Javier Urcid (2005, 11), remind us that it is important to remember that an inscription is on something and that this something is in a particular place with which the epigraph has a significant relationship.

The Maya epigrapher is confronted with several different classes of genre: literary, narrative, and contextual/material. Because the field has often focused narrowly on the decipherment of specific glyphs and the content of the inscription, the significance of an epigraph's physical context has been minimized with some notable exceptions, such as text and image relationships and the obvious relationship that "name-tags" and dedicatory/self-referential text have to the object on which they are inscribed. Moreover, because of the recent date of the linguistic decipherment of the script, literary genre has also been under-studied in Maya epigraphy, although this issue is of less importance to the present study (see Hull and Carrasco 2012). The important point in raising these lacunae in glyphic studies is to stress

the fact that until the physical context of writing and the narrative genres that it encodes are addressed with the same intensity that has characterized the script's initial decipherment, it will be difficult to adequately attend to the nuances of textual agency.

At the beginning of this chapter I referred to the suggestion that one of the primary functions of Maya writing was as a script for performance, a basic template for recitation literacy, which we might further simplify to the idea that writing was a medium for communicating narrative content. However, as Marshall McLuhan (1964) and Roger Chartier (1995) suggest, the form of the media that transmits the text/message to the reader/viewer is also meaningful. It is precisely in the meaning of the media and mode of physical presentation that much of textual agency lies.

The scholars cited previously who have championed the oral performance of texts to a listening audience have based their arguments largely on the documented use of codices during the early Colonial period. Following in this vein, I now turn to the depiction of books and their use from the Classic period not only to emphasize their use as scores for performance, as discussed previously, but also to reveal how writing in the particular form of a book made language manifest in ways not so dissimilar from the procession of the Torah in Jewish ceremony. This use of text is largely correct for the book, but as depictions of codical use demonstrate, books were used in ways distinct from other media. Following this discussion, I turn to pseudo-glyphs, which are a clear example of the importance of textual presence apart from semantic content. Finally, moving away from material genres to narrative ones, the last part of the chapter explores first- and second-person discourse in inscriptional narratives.

THE MANIFESTATION OF THE LANGUAGE: THE GENRE OF THE BOOK

Our knowledge of Maya codical genres leaves much to be desired because of the zeal with which colonial missionaries, like Landa, fed books to the bonfires of spiritual conquest. However, despite a complete lack of codices from the Classic period, there is a wealth of depictions of books in ceramic art that document that, in addition to the performance of texts discussed above, the book was an important component of ancient ritual. Ceramic painting shows books used in ways similar to Landa's description. Figures 6.1 and 6.2 illustrate two such examples. The first, Kerr Vessel 1196, presents two scenes of an old god lecturing to two younger figures, as indicated by the speech

scrolls that emanate from his mouth. In the first scene he points to the ground and possibly states “1 K’an 1 Yax u ti/SAK-ta-li ?-ko-na ta-ta-bi,” for the not entirely transparent passage *1 K’an 1 Yax usaktaal choko’n tatbi.* The line begins with the date 1 Kan 1 Yax and ends with the word *tatbi,* possibly meaning “thick line” (Kerry Hull, personal communication, 2010). In the second scene the old god holds a brush and appears to count “7, 8, 9, 12, 13, 11” to the youths before him, the first of whom peers down at a codex.

The counting represented in this scene could be a literal counting of the numbers recorded in the codex; however, given that in many Mayan languages the words for ‘to count’ and ‘to read’ *(xok* in Yucatec Mayan) are the same, this image and similar ones could represent the idea of reading (see Brown 1991, 491; Houston 1994). A similar presentation of codices and a possible reference to that act of reading is also found on the God **D** Court Vessel, recently described by Erik Boot (2008). On this vessel, an anthropomorphic opossum and vulture both hold books. The opossum presents a closed manuscript, but the vulture points to a text consisting of numbers, possibly a reference to the act of reading. The other major sets of terms for ‘to read’ in Mayan languages are based on the roots of *il* ‘to see’ or *al* ‘to say’ for expressions that translate as either ‘to look at the surface (of paper) or paper/books’ or ‘to say the page’ (Kerry Hull, personal communication, 2010):

Ch’orti’

‘to see the book’ *ilhe’ jun*
‘to say the page’ *ahe’ (ut)*
‘do the book’ *che’ ak’ jun*
‘able to read’ *e’ ut*
‘Is the book?’ *ni’ ank’ ut ta’ ?*
‘to count’ *tzik* or ‘to recount (a story)’ *tzik*

Yucatec

‘to count/read’ *xok*
‘story’ *tzikbal*

The scene on this vase and others perhaps represents a kind of visual kenning in its presentation of different kinds of reading.

The second vase image (Figure 6.2; K8075) accords closely with the ritual use of books described in Landa’s account; the book lies beneath an offering plate filled with incense *(pom)* atop an effigy censer stand and is treated as an object of ritual focus. Glyph F of the Supplementary Series likely read *ti’ huun* (lit. “mouth-book/paper”), and the setting up of deity effigies recorded in the 819-day count is possibly textual references to the ritual use of the book depicted on

K8075, although the overall meaning of these passages has yet to be fully deciphered. The secondary text of this vessel also remains opaque; nevertheless, the glyph immediately before the enthroned figure represents a hand holding a brush, with the agentive prefix *aj,* and suggests a loose translation as 'writer', which would correspond well to the image this text labels.

Another depiction of the ritual use of books found on Kerr Vessel 1377 (Figure 6.3) illustrates an enthroned codex with what appears to be an ancestor bust emerging from either it or the serpent maw that contains them both. The central scene of sacrifice on this vessel shows an effigy *incensario* feasting on the innards of a sacrificed victim while engaging the gaze of the officiating priest (Carrasco 2005, 58). Both the book and censer are animated objects that possess the vital forces discussed in recent literature primarily focused on stone monuments and portraits (Carrasco 2005; Houston 2004c, 291; Houston and Stuart 1998; Houston, Stuart, and Taube 2006; Newsome 2001). A similar scene of codical presentation is found on K501 (Figure 6.4), where a book with a sculpted head on top figures prominently in a mythological ritual event, possibly involving the opening of a portal and the emergence of a couple (Houston, Stuart, and Taube 2006, 53).

FIGURE 6.3. K1377. Classic period cylindrical vessel depicting nighttime sacrificial scene (photograph by Justin Kerr, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

The depiction of codices found in the imagery of these and other vessels suggests uses ranging from pedagogical to ritual. They largely support the claim that the oral performance and presentation of books were of critical importance to certain Maya rituals or even public performances. Based on this evidence we may tentatively argue that books were a means of textual presentation in ancient Maya culture and that people read from them to an audience. However, these images also make clear that the book as an object and text embodied

was a critically important cultural symbol. That is, the material genre of the book meant something in itself.

As both records of critical information and ritual objects, books were rather important material agents and cultural symbols along the lines that Alfred Gell (1998) has argued that all manufactured and even some natural objects are. Mesoamerican books served as loci for ritual action and critical symbolic instruments in a variety of cultural practices and institutions. Although this brief survey of depictions of books raises questions about the importance of inscribed objects in general, it is to pseudo-glyphs that we now turn to see how a mimic of writing is perhaps one of the best testaments to the formal importance of writing in marking an object as belonging to a particular object class and demonstrating the importance of the presence of writing.

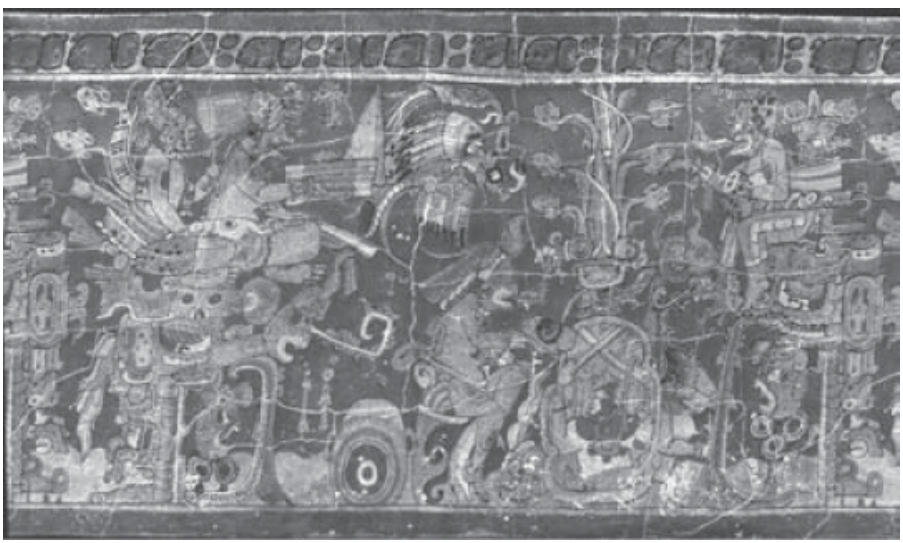


FIGURE 6.4. K501. Classic period cylindrical vessel depicting mythological scene with scribal deities seated atop a personified mountain cave (photograph by Justin Kerr, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

THE REPRESENTATION OF WRITING: PSEUDO-GLYPHS

So-called pseudo-glyphs are a good example of both the representation of writing and a compelling testament to its symbolic importance (Figure 6.5, K5973). A recent analysis by Inga Calvin demonstrates that vessels with pseudo-glyphs actually have a higher occurrence in the burials of elites than vessels with legible texts, suggesting that the presence of text, whether actual writing or the mimic of writing, was

an important component of elite vessel ornamentation. She has also found that "greater resources, labor investment, artistic expertise and esoteric knowledge are displayed on pottery with real glyphs" (Calvin 2006, iv). If this is true, it suggests that mimicking writing added value to these vessels even if they lacked real texts or presented less specific iconography (Houston 2000, 150; Reents-Budet 1994, 139—42). What they did present was the style of a highly valued vessel. On vessels that presented legible texts it is questionable whether the user was expected to perform the Primary Standard Sequence (PSS) text, a self-referential formula that records the dedication of the writing or painting of the vessel (Figure 6.6, K5360). Rather, the PSS more likely marked vessels as belonging to certain classes (Houston, Stuart, and Taube 1989). The textual formula of the PSS varies slightly by region, but it appears that this text was a critical part of elite vessel ornamentation (Beliaev, Davletshin, and Tokovinine 2010; Coe 1973; Hull 2010; MacLeod 1990; Reents-Budet 1994; Stuart 2006). Pseudo-glyphs raise the possibility that at this time there were sumptuary laws that regulated who could own and commission writing. Sumptuary rules were known to govern dress and royal gifts of costume and regalia in Aztec society (Anawalt 1980, 1990; Umberger 1996, 103). If this admittedly conjectural hypothesis is true, it would explain the significance of pseudo-writing in compositionally similar positions as legible writing, as well as the great actual and symbolic value that gifts of ceramics with legible texts must have had.

FIGURE 6.5. K5973. Classic period vessel depicting water bird with pseudo-glyphs (photograph by Justin Kerr, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

The presence of a PSS made the vessel formally correct. So much so it seems that it did not even have to be a real text. The text simply had to be in the correct place in the composition—text reduced to compositional form. The presence of text placed the object into a

specific conceptual category and, as a standardized caption, functioned in much the same way as *E Pluribus Unum* does on US currency. A similar phenomenon is perhaps also found in the late inscriptions of the northern Yucatan. These inscriptions on some occasions, although by no means all, appear to be illegible or employ ungrammatical syntax but nevertheless were an important part of the sculptural program (see the inscriptions above the eastern doorway of the Monjas at Chichén Itzá). In all these cases ornamentation that emulated writing suggests a function apart from verbal performance or even the normative semantics or phonetics of specific signs.

In a recent essay, Dennis Tedlock (2012) argues that in some cases Maya writing is comparable to the use of writing by concrete poets, whose poems relied not only on the language but also on the poem's graphic presentation for their message or aesthetic value. In reality, the ceramic feasting vessels upon which PSS texts are most commonly painted and inscribed represent a highly complex object class, which presented iconography and textual formula (and their mimics) that conformed to relatively standardized compositional conventions. Beyond their form and decoration as objects, they were used in feasting events and as gifts in systems of royal reciprocity. The existence on these vessels of what may be loosely termed the representation of writing attests to the importance of the presence of writing in marking objects as belonging to royal vessel categories, such as chocolate vessels, plates, and bowls, just as vessel shape was indicative of the kinds of foods associated with them.

FIGURE 6.6. K5360. Classic period vessel depicting water birds with legible Primary Standard Sequence (photograph by Justin Kerr, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

It remains to be seen whether the presence of writing in other contexts marked objects or even structures as belonging to particular classes, but the expectation that writing should be part of the decorative program of architecture is alluded to in the following passage, also from Landa (Tozzer 1941, 161): "[T]hey celebrated this

festival every year, and besides this, they renewed the idols of clay and their braziers; for it was the custom that each idol should have its little brazier in which they should burn their incense to it; and, if it was necessary, they rebuilt the house, or renovated it, and they placed on the wall the memorial of these things, written in their characters." In this case the text was a memorial to these events and signaled that the structure had been renovated according to proper ritual protocol. The fact that in both cases text decorates surfaces according to particular prescribed norms minimizes its semantic content while emphasizing the importance of its presence. Much like inscriptions on modern monuments—one can think of Yale University's Sterling Library with its own glyphic inscription—Maya ones seem to have symbolized something by their presence to the extent that what they actually said fades in importance. In these instances and others where writing either marks classes or is integral to decorative programs, its importance is less about its semantic or narrative content than about referencing itself and what writing means as a cultural phenomenon and a particular kind of mark making.

RECORDS AND DEPICTIONS OF SPEECH AND SPEAKING OBJECTS

The representation of speech, as is clear from the citations at the beginning of this chapter, has often been used as evidence to support the oral performance of inscriptions and the notion of recitation literacy more generally. The presence of first- and second-person discourse has likewise been seen to break the fourth wall of ancient art (Houston 2006, 229), which it almost certainly does in those few instances where the object speaks to the viewer/reader. However, although the merging of the existential fields of the depicted and viewer no doubt occurred (see Carrasco 2005, chapter 2), this collapse cannot be determined solely on the presence of first- and second-person and quotative discourse. Indeed, by focusing on spoken discourse as an indication of the collapse or obliteration of the distance between viewer and the depicted narrative, attention is diverted from how narrative-internal discourse interacts with associated imagery or the physical context of the text and other narratives in the third person.

Records of speech, as revealed by the recent decipherment of first- and second-person pronouns and quotative particles, such as *che', cheheen,* and *yaljiiy,* and the graphic elements that indicate and frame depicted speech, such as speech scrolls, bring us tantalizingly close to Mesoamerican voices. The decipherments of these terms have revealed

genres of discourse that are the closest we come to the speech of historic and some mythological figures, and possibly even that of objects (Grube 1998; Houston and Stuart 1992; Houston, Stuart, and Taube 2006, 228-29; Hull, Carrasco, and Wald 2009; MacLeod and Reents-Budet 1994, 132; Stuart 1993). Speech recorded textually and depicted through the use of speech scrolls presents a clearer picture of the individual in inscriptional narratives than is typically provided by the standard third-person discourse of inscriptional genres. In addition, Nikolai Grube suggests that an important implication of quotatives

> is that the written objects themselves were regarded as the originators of the written message they carried. These references reveal an essential unity between a spoken text and its written representation, but also between object and the speaker of a message. Inscriptions were not only the physical ground on which a text was carved or painted. They embodied the text in a permanent medium and continuously spoke it. Thus for the Maya, hieroglyphic inscriptions still represented ongoing speech acts. (Grube 1998, 160)

Grube's observation and isolation of quotative discourse have been an important step in understanding ancient speech genres. In two important textual examples, one from an unpublished bone from Tikal (MT 167) and another from the Seibal Hieroglyphic Stairway, Tablet 9, Grube (1998, 164) notes the presence of the phrases *chehe'n tubaak* and *chehe'n ti yuxul,* which he translated as "it is said on/by his bone" and "it is said on/by his carving," respectively. At the time, he interpreted these texts as recording the speech of the object itself. Recently Hull, Carrasco, and Wald (2009; also see Boot 2008) have argued that *chehe'n* is better understood as "I say/said" and *che*' represents the third-person quotative. If this interpretation proves correct, then these passages are better translated as "I said on the bone of" and "I said in the carving of." In a similar passage found on the Vase of the 88 Glyphs (K1440), the text possibly reads *hiin* [Name] *chehe'n, utz'ihbil* [Name] *u-?-?-na sajal* for a loose translation of "It is I, the 'Scribe of the 88 Glyphs,' who has spoken, [it is] the writing of the 'Scribe of the 88 Glyphs,' the ? of the vassal lord." In this case, the scribe/author of the text is fronted, perhaps to emphasize that not only is it his writing, but that this text is a narrative that he actually spoke. Thus, instead of the object speaking of its own accord, it is the medium through which another, usually human, agent speaks. By revising Grube's interpretation I am not suggesting that objects and deity effigies were inanimate, lacked agency, or were mute; I only wish to highlight the fact that at this time quotative texts are equivocal on this point, and several of the more important texts, such

as that reproduced in Figure 6.7 (see Mayer 1987, plate 125), remain opaque and await further epigraphic investigation to fully reveal their significance to this topic.

It is useful to remember that we have yet to find texts similar to the many Greek vases and other objects that state that "so and so made me" as a kind of signature or personalizing label. One typical example reads, "I am Cephisophon's kylix; if anyone should break me he must pay a drachme, since I am the gift of Xenyllos" (Jongkees 1951, 260). Even the texts on sculpture with a clear religious context—like the Nicandre *korē* found in the sanctuary of Artemis at Delos, dating to around the mid-seventh century BC and stating that "Nicandre dedicated me to the goddess, far shooter of arrows" (Newby 2007, 7)—do not necessarily suggest the animate nature of the sculpture itself. In these and other inscriptions it does not seem that we should think of the vessel or perhaps even the sculpture as an animate entity. Likewise, one would not attribute animacy to a cup from the fast-food chain Whataburger because it offers the polite command "When I am empty please dispose of me properly." I do not mean to trivialize the recognition of quotative and first- and second-person discourse in the inscriptions, but the presence of such narrative genres in themselves, even if the Maya had used them in ways similar to the Greek examples, does not prove animacy or textual performance beyond what appears to be a relatively common linguistic trope. Narratives in all these cases from diverse cultural contexts personalize the object on which they are inscribed. The Greek inscriptions and even the Whataburger cup are clear examples of speaking objects or, to put it perhaps more accurately, instances where the object is the speaking subject.

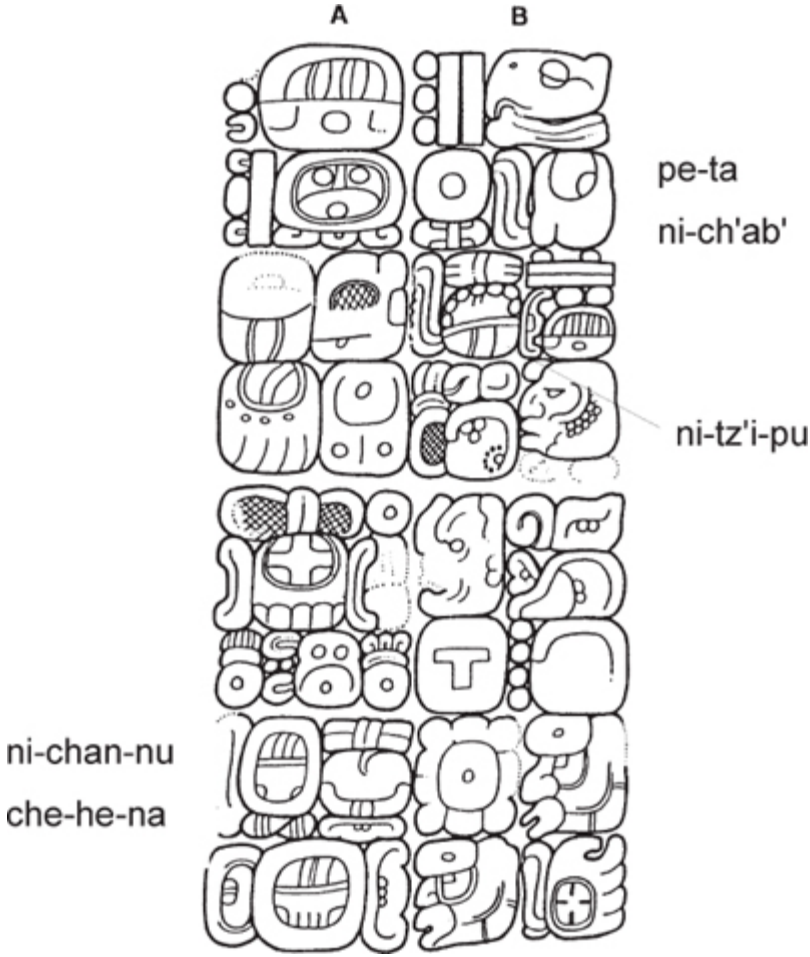


FIGURE 6.7. Detail, inscription from an unprovenanced limestone panel (drawing by Nikolai Grube, after Mayer 1987, plate 125).

Again, this is not to say that objects were not conceived of as animate. Speech scrolls emanating from depictions of deities, known to be represented materially by icons and the talking crosses of the Yucatan, are examples of objects that within particular contexts were thought to speak directly to the viewer (Grube 1990). It is unclear if the corpus of writing available to us currently preserves examples of this kind of speech. In the following section I will examine a number of texts that record speech, both internal to the depicted narrative and those directed at the spectator. That is, instead of seeing the presence of first- and second-person and quotative discourse as evidence of the inclusion of the spectator in the same space-time or existential field as the depicted narrative, I make a distinction between first- and second-person and quotative discourse that marks actions between characters internal to the narrative (narrative internal dialogue)—where the viewer is the third-person audience, not an interlocutor in the internal

dialogue—and speech (or other actions) directed specifically at the spectator.

FIGURE 6.8. K8008. Polychrome cylinder vase from Burial 196, Tikal, Guatemala, depicting a dialogue between a hummingbird figure and Itzamnaaj (photograph by Justin Kerr, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

Narrative Internal Dialogue

One of the more common forms of depicted speech is found in dialogue scenes. Figure 6.8 (K8008) presents one of the better-known examples of this genre in which a hummingbird figure converses with the deity Itzamnaaj. The PSS encircles the rim of the vessel and a secondary text records what the hummingbird said to Itzamnaaj *(yaljiiy tzunun ti itzamnaaj,* "was said by the Hummingbird [the preceding phrase] to Itzamnaaj"). The specifics of what was said remain to be fully deciphered; however, despite the use of the second person in the quoted text *(a-wichnal,* "in your presence"), this conversation, like that illustrated in Figure 6.1, does not engage the viewer, who stands a degree removed from the narrative. This kind of quoted speech is also found on K0793, which presents the first-person independent pronoun *hiin* and the absolutive first-person singular *-een;* nevertheless, the dialogue is internal to the depicted narrative. Speech occurs entirely within the internal narrative of this relatively common kind of scene in which figures are depicted in conversation with each other. Textual captions in these scenes seem only to add more information but do not alter the nature of the genre of the scene itself.

Houston, Stuart, and Taube (2006, 229) seem to disagree and have suggested that texts using quotatives and first- and second-person discourse were "extremely rare, and the Maya deployed them only in special circumstances in which they attempted to break the existential field between the viewer or reader and those who were depicted or

referenced. In such contexts, the observers' aloofness from an image or an inscription was obliterated; by forthright invitation, they were encouraged to enter the time and space of prior events." This is an important issue for understanding textual agency and for addressing the agency of inanimate objects in general. However, it benefits from fuller unpacking to clearly understand not only the various uses to which first- and second-person discourse were put but also the categories of existential fields that may exist between viewer and object, reader and text, and under what conditions these fields are generated. The use of first- and second-person discourse does not in itself invite the viewer into the space-time of the narrative any more than narrative imagery does.[3] Rather, narrative in art and language placed the viewer a degree removed from the event depicted or described. The object that speaks to the viewer or acts as an agent in the same space-time of the viewer truly collapses the distance between viewer/reader and object/text, examples of which we review in the following.

Composite Forms

In some rare examples depicted dialogue between characters internal to the narrative, like that seen in Kerr 8008, is juxtaposed with first-person discourse, which seems to present statements of a specific individual to the viewer/reader. The best example of this to my knowledge is the Regal Rabbit Vase (K1398), which depicts God L pleading his case against a trickster rabbit to the Sun God (Hull, Carrasco, and Wald 2009; Stuart 1993; Wald and Carrasco 2004). The spoken caption between God L and the Sun God records that the rabbit took God L's belongings; however, the Sun God claims that the rabbit is not with him, although the image clearly shows the rabbit hiding behind him (Figure 6.9; see Hull, Carrasco, and Wald 2009 for a transliteration and translation). In this dialogue the text augments the scene and clearly refers to the interactions of the depicted figures. The column texts also employ first-person discourse (Figure 6.10) and present a case in which the speaking subject lies outside the depicted narrative and directly addresses the reader. The subject is most likely K'ahk' Tiliw Chan Chaak, the ruler of Naranjo to whom the vase belonged, according to the PSS. He states, "It happened on this day, at the shrine of Pip Ha' that I overturned the throne."[4] Elsewhere, Robert Wald and I (2004) have argued that the entire program of K1398 is an analogy between K'ahk' Tiliw Chan Chaak's military action in his youth and the mythology depicted on this vessel. This analogy is clearly one that K'ahk' Tiliw was particularly interested in developing because he uses the same composition for the scene on Naranjo Stela

22, although in this case he sits in the position of the Sun God, and the defeated ruler of K'anal Witz (Ucanal) pleads before him in the place of God L. The narrative on this stela is in the standard third person. The important issue raised by this vase is that its text and imagery pull together a series of references that require a substantial amount of knowledge from the viewer and are incompatible with the oral performance of this text even if portions of the narrative, one might imagine, allude to dramatic performances of the mythological story depicted.

FIGURE 6.9. K1398. Regal Rabbit Vase (photograph by Justin Kerr, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

It seems that K'ahk' Tiliw Chan Chaak speaks to himself or perhaps, if the vase was gifted, to a vassal lord. In either case the meaning of the text lies almost entirely outside the realm of oral performance. Writing here serves to explicitly connect a mythological dialogue similar to that found on Kerr 8008 to the personal history of the Naranjo ruler. The specific visualization of this myth was so important that a similar composition was used on both the vessel and stela.

Another informative instance of first-person discourse in which the text conveys the speech of a specific individual occurs in the "artist's signature" section of the highly poetic narrative found on the previously discussed Vase of the 88 Glyphs (K1440). If our translation is correct, then we find a couplet between what the Scribe of the Vase of the 88 Glyphs said (*cheheen*) and his writing (see Hull, Carrasco, and Wald 2009). This suggests that the text of this vessel at least up to the signature, which is a meta-reference to the narrative, could have been intended for verbal presentation. Indeed the text preceding the signature concludes with the couplet *ik' k'uh awax?, hai ak'aywi ik'julkab,* for "The Wind God shouts?, He sings [in/at] the Black

Speared Earth [Cave],” suggesting that the entire narrative recorded in the inscription was sung by the Wind God, Ik’ K’uh. However, the fact that the literary genre that this vessel preserves is exceedingly rare suggests that this is an exception to the vast majority of the surviving material, which is not marked internally as spoken texts. It is interesting to note that Allen Christenson (2012) has noticed a higher frequency of poetic devices, such as couplets and chiasm, in quoted dialogue in the Popol Vuh, and this is also apparent in the highly poetic text of the Vase of the 88 Glyphs.

FIGURE 6.10. Detail, Regal Rabbit Vase (drawing by M. D. Carrasco).

SPEAKING IMAGES

As the examples examined in the preceding section suggest, the use of first- and second-person discourse is far more common in narratives found on ceramics than in the monumental stone corpus, which almost exclusively records narratives in the third person. Third-person discourse provides an implied witness to events described (Hull, Carrasco, and Wald 2009, 36). In contrast, first- and second-person discourse, as Houston and Taube suggest, implies dialogue or a desire to identify a particular historic figure with a particular narrative. In some cases this seems to convey the idea of an author/speaker. As discussed, some dialogue is clearly internal to the depicted scene, like that on the Hummingbird vessel (K8008). However, several important monuments present first- and second-person discourse that appears to reach out beyond the depicted narrative to engage a living addressee. These texts, as rare as they are, shed important light on objects as speaking subjects as well as the very function of these discourse genres in the monumental corpus.

One of the best examples of these kinds of texts occurs on the assemblage of objects including the Tablets of the Orator and Scribe (Figures 6.11 and 6.12) and Panel of the 96 Glyphs (Figure 6.13) that comprised a stone throne at the base of the tower in the Palace complex at Palenque. The Tablets of the Orator and Scribe each represent a single figure addressing their carved speech to a person who would have been seated on this throne (Porter 1994). Houston, Stuart, and Taube (2006, 74-76, figure 2.16) have rightly suggested that these figures interact with the unseen person to whom they direct their gaze and gestures of communication. However, the text's internal information suggests that instead of their speech being directed at whoever filled the void between them, it was actually addressed to a specific person. Both inscriptions employ the phrase *ch'ab-ak'ab* ("creation-darkness"), commonly, but not exclusively, used in parentage statements expressing the relationship between a child and father.[5] Here it is marked with the second-person singular ergative pronoun *a-* for "your creation-darkness." The Tablet of the Orator mentions Ahkal Mo' Naab, whereas the Tablet of the Scribe simply lists a more generic Matwiil Ajaw (the ruler of Matwiil, one of the important lineages of Palenque). Taken together they suggest the chiasmic arrangement ABBA, a common poetic device in Palenque inscriptions:

Tablet of the Orator

ubaah ? ach'ab-ak'abil
yajaw k'inich ahkal mo' naab bakab.

Tablet of the Scribe

ilaaj abaah matwiil ajaw
usih ? ach'ab-ak'abil

Tablet of the Orator

The person of ? is your creation in darkness,
the lord of Ahkal Mo' Naab, the Bakab.

Tablet of the Scribe

Seen is your person/body Lord of Matwiil,
the gift/child of your creation in darkness.

Significantly, K'inich K'uk' Bahlam, the son of Ahkal Mo' Naab, was the patron of the Panel of the 96 Glyphs and therefore likely the patron of the Tablets of the Orator and Scribe as well. The passages as presented here suggest that the sculptural figures are speaking to Ahkal Mo' Naab and referring to his son K'inich K'uk' Bahlam. The parentage statement in the Panel of the 96 Glyphs narrative, as well as its focus on ancestors, in particular K'inich Janaab Pakal, supports this reading. Even the chiasmic structure of the combined texts of the Tablets of the Orator and Scribe mirrors that of the more complicated but nevertheless similar chiasmic structure of the Panel of the 96 Glyphs. Whatever the exact interpretation, these texts are clearly objects addressing a person outside the surviving sculptural program, although seemingly not just any person. Indeed, if my understanding of the inscription is correct, these figures are specifically speaking to the dead king K'inich Ahkal Mo' Naab about his son, a feat not as amazing as it might at first appear considering K'inich Janaab Pakal is said to have overseen the completion of K'inich K'uk' Bahlam's first twenty years of rulership. This statement is possibly explained by the fact that the Panel of the 96 Glyphs was sighted within view of the Palace Oval Tablet, which depicts Pakal receiving the heirloom Drum Major's headdress from his mother. This sculpture itself might have been a witness to K'uk' Bahlam's first twenty years as king.

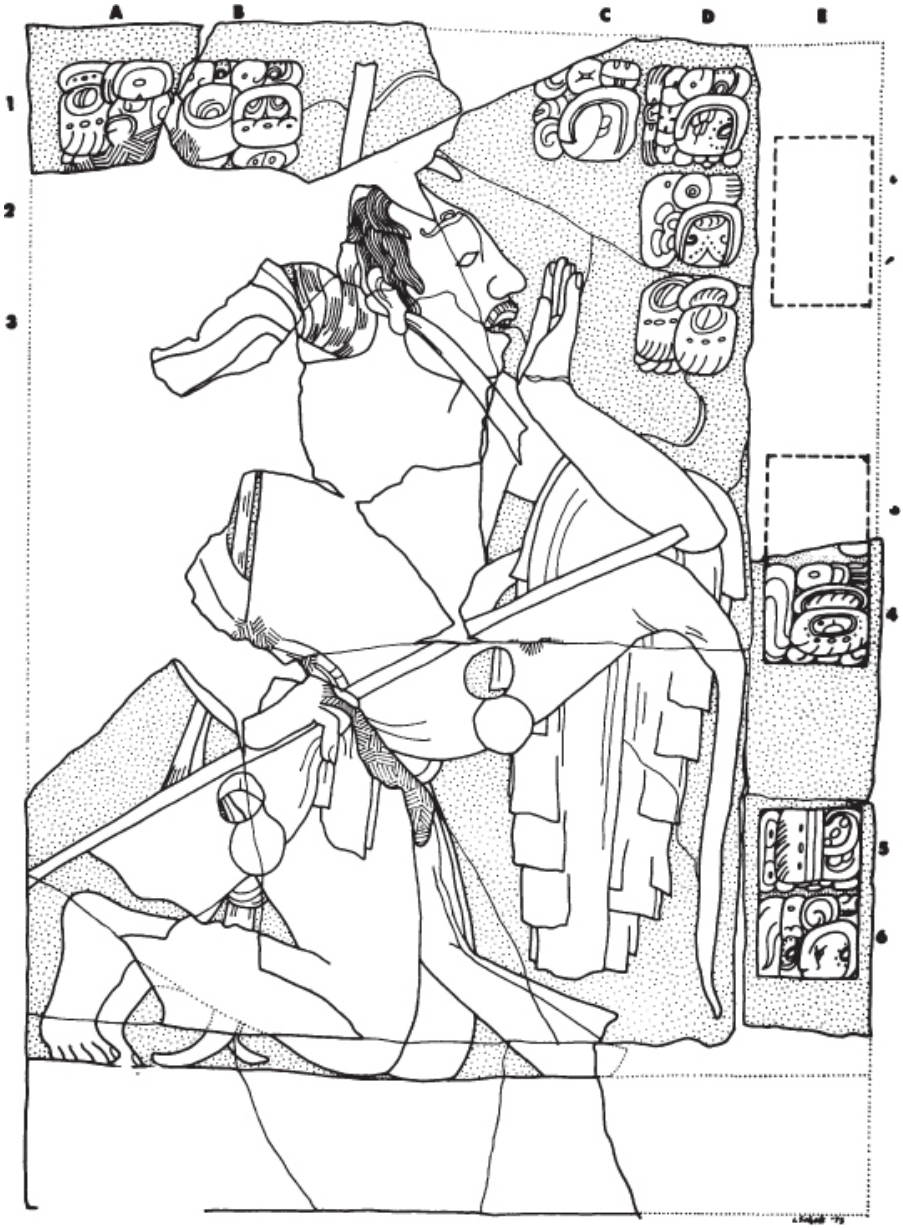


FIGURE 6.11. Tablet of the Orator (drawing by Linda Schele, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

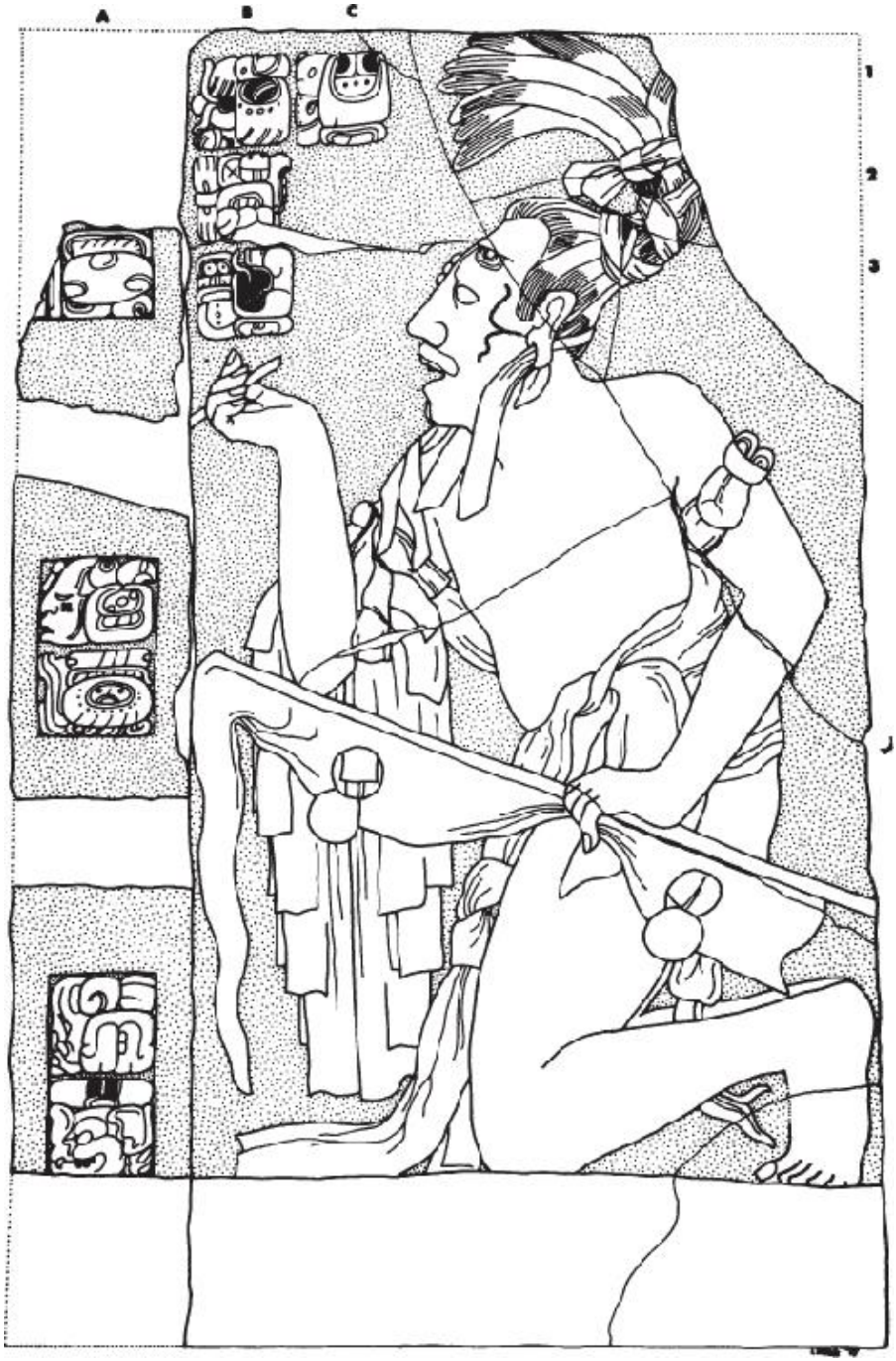


FIGURE 6.12. Tablet of the Scribe (drawing by Linda Schele, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

SELF-REFERENTIALITY OF TEXTS

The self-referentiality of a text, as seen in the PSS discussed previously, is another clue that the significance of inscriptions is in large part tied to their presence. To identify this kind of self-referentiality, Loprieno (1996, 43), a scholar of Egyptian hieroglyphs, suggests looking to those instances in which third-person pronouns refer to the text itself. A particularly good example of this kind of self-referentiality, in addition to the signature found on vessels such as K1440 already discussed, is found on the Panel of the 96 Glyphs. The narrative concludes with the following statement, which describes the carving of the throne (L4-K6):

yuxuluuj k'ahntuun
utapaw ? woj[6]

he carved the throne,
he inscribed glyphs upon it.

The carving of this monument is the second part of a dedicatory frame, the first stich of which begins the Panel of the 96 Glyphs. In this case, the monument is cited in the couplet: "he carved the throne, he inscribed glyphs upon it." In addition, the carving of the text onto the monument itself seems to be an act of dedication. If this is a correct interpretation of the inscription, then the performance of the inscription (if it was done at all) did not fulfill the meaning of this text, or at least this section of it; rather, the act of writing was most meaningful. Self-referentiality suggests that an inscription's "meaning" was whole and did not rely on performative elaboration for its full realization, because it referred to the dedication of the monument or object. Performance was often part of the dedication of an object or monument, but there is no evidence, to my knowledge, for the recitation of the dedicatory texts inscribed upon monuments. Dedicatory statements are a genre that forms a substantial portion of the inscriptional corpus (Stuart 1995, 99—100) and, in my view, pose a major problem for theories that privilege the oral performance of texts as central to their meaning and function.

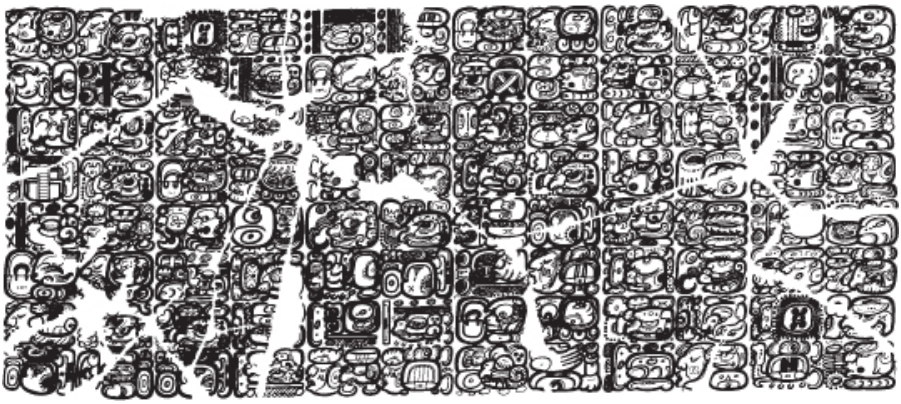


FIGURE 6.13. Detail, Panel of the 96 Glyphs, Palenque, Mexico (drawing by Linda Schele, courtesy of the Foundation for the Advancement of Mesoamerican Studies, Inc.).

EXISTENTIAL FIELDS

One of the major claims made about the representation of speech is that it crosses the fourth wall to bring the viewer into the space-time of the depicted narrative. Actual speech within the inscriptional record as depicted through the use of speech scrolls and indicated with quotative particles or first- and second-person discourse presents a clearer picture of the individual in inscriptional narratives than is typically provided by the standard third-person discourse of inscriptional genres and shows that text was placed in the position of speech. It is important to note that the presence of first- and second-person pronouns does not in itself provide evidence for the oral performance of text. As I have also suggested, in most cases first- and second-person discourse records dialogue between figures within a contained narrative in which the viewer is the thirdperson audience—not the addressee. The fact that the Maya scribe took great pains to indicate speech in the inscriptions suggests that when these indicators are not present, perhaps these texts belonged to genres that were not primarily intended for oral performance or did not find meaning through performance. In fact, in the case of K1398, meaning emerges only through the interaction of the text and imagery as well as the juxtaposition of the spoken texts and the historical texts of the columns. The same is true of the Tablets of the Orator and Scribe. Thus, text-internal evidence for the actual performance of most inscriptional genres is scant. Most texts augment imagery that would have provided the necessary additional information that a specific text lacked. Textual monuments that lacked accompanying imagery are almost exclusively written in the third person, with a few notable

exceptions that currently resist complete decipherment. So few are these examples that they are the proverbial exceptions that prove the rule. In nearly all cases inscriptional narrative does not break the fourth wall to address the viewer/spectator. Moreover, the few discussed above that present quoted text attribute it to a historic figure and are evidence more of authorship than of actual performance by that particular person.

CONCLUSION

In this chapter I have briefly examined texts from the vantage points of genre, performance, and media to suggest that the presence of text was an important part of the inscribed object's meaning and that the agentive power of a text comes just as much from its embodiment and presence, manifested as a calligraphic monument or dedicatory utterances materialized, as it does from its performance. I have contended that a genre-based approach reveals the true richness of inscriptional narratives, some of which were performed and others—the majority of surviving examples—were intimately tied to their material support to the extent that these texts often refer to the monuments upon which they are inscribed, the devotional acts directed at these objects, or the physical environment that the monuments that present them constitute. In the view presented here, textual agency, in the genres that are most commonly preserved, is found in its presence and not primarily through its oral performance.

In conclusion, I return to the question of agency because it might seem that I have not addressed the issue of agency at all, or that the use of the term throughout does not exactly correspond to definitions of agency currently in vogue in the anthropological literature. Indeed, although certain aspects of the discussion verge toward the agency of objects described by Alfred Gell (1998), in which an art object is an index of the agency of the person who made it, what I have presented here is more about the agency of inanimate objects, marks, and that subspecies of marks called writing. In the examples presented above, we have seen the uses of inscribed objects in a variety of contexts. We have seen moments when objects appear to speak to the viewer, and others when the formal characteristics of writing superseded semantic content, the property normally viewed as the sine qua non of writing. Other examples of writing serve as name tags to objects and imagery (Houston and Taube 1987). Reading these labels would mean little to those who could not see the image and redundant to those who could.

In the end, this chapter is only a prolegomenon to a much-needed fuller study of ancient Maya genre; however, even this brief treatment

has demonstrated that the function of Maya writing is not singular, nor can it be explained adequately through a single interpretive lens any more than our current use of writing can be.

NOTES

1. I use the label "performance" here to describe a wide range of related concepts. The interested reader should review Takeshi Inomata and Lawrence S. Cohen's *Archaeology of Performance: Theaters of Power, Community, and Politics* (2006) for a discussion of the use of the concept of performance in the discipline of archaeology.

2. Alfred Gell (1998) makes a similar argument for the fabrication of objects and images. He sees these items as standing in an indexical relationship to the maker. Perhaps more closely related to the issue at hand are discussions of mark making in modern and contemporary art (Krauss 1985), as well as Asian calligraphic traditions. Scholars of both have long recognized that marks embody the movement of the artist, the vitality of which continues to persist in the mark.

3. This was a feature of particular strains of Western art more than that of the Maya, who seemingly were not interested in creating a window into another space and verisimilitude except in certain artistic genres, such as portraiture (Spencer 2007).

4. In the main body of the text, I have translated the passage to read more smoothly in English. The following is a transliteration, grammatical analysis, and literal translation:

UH-ti-ya K'IN-ni u-WITZ-li pi-a CHAN-na-CH'EN-na
uht-Ø-iiy k'in u-witz-il pi[p]-[h]a' chan ch'een
It happened [on this] day, [at the] mountain of Pip Ha' place?

hi-na PAT-ta bu-ni-ya "jaguar-throne"
hiin patb'uniiy "Jaguar Throne"
It is I who overturned the 'throne.'

5. See Timothy Knowlton (2012) for a treatment of a colonial Yucatec Maya cognate to this phrase in the Ritual of the Bacabs.

6. Transcription: L4: yu-XUL-ji K'AN-TUN-ni; K5: u-ta-pa-wa; L5: ?-wo-jo.

SEVEN

Contingency and Innovation in Native Transcriptions of Encrypted Cuneiform (UD.GAL.NUN)

J. Cale Johnson and Adam Johnson

> [I]t is no longer enough simply to invoke human actors and pay homage to Bourdieu and Giddens.
>
> **DOBRES AND ROBB (2000, 10)**

The comingling of the material sign and its seemingly limitless (possible) entextualizations has functioned as a master trope in so many disciplines and in so many ways that we must be particularly vigilant in any discussion of notational systems (epigraphy) and the constraints under which their practitioners operate (agency). We must, first of all, deny here the relevance of (or at least try to abstain from) metaphorical extensions that describe "culture as text that can be read —or of *a* culture as a Geertzian (Geertz 1973, 453) ensemble of texts" (Silverstein and Urban 1996, 1; see Olsen 2003, 90, and Preucel 2006, 138–42, for brief overviews of the "culture as text" metaphor). We are concerned here with the actual inscription of real text-artifacts and, in particular, the manifold and densely imbricated array of contingencies (material, notational, linguistic, and social) that any would-be scribal innovator (or even an orthodox tradent) must overcome to achieve, as it were, an ongoing sequence of coherent recontextualizations (viz. reinscription of the "same" text on numerous occasions). As text-*artifact,* an archaeologically recovered object must be dealt with as it would be in any other branch of materials analysis: procedures for the construction and demarcation of writing surface must be reconstructed and the design principles underlying the operation of the notational system must be identified. This will be described below in terms of what Cancik-Kirschbaum and Mahr (2005) have called the "aesthetic profile" of cuneiform as a notational system, but we first situate this notion of aesthetic profile within recent literature on network theory, particularly as instantiated in the work of Bruno

Latour. The goal of this first section is to define those aspects of scribal practice that are largely below the radar of individual practitioners: a set of embodied practices that correspond to Bourdieu's *habitus,* practices that are carried out more or less automatically and involve little or no real agency.

Only once this *inculcated scribal habitus* is in place do we turn to the distinctively textual aspects of the *text*-artifact, drawing on philological tradition as well as notions of entextualization and recontextualization as defined within linguistic anthropology (Mertz 2007, 345–46; Preucel 2006, 138–42, 254–58; Silverstein and Urban 1996, 1–17).[1] This second half of the chapter focuses on how an individual scribe, embedded within hierarchies of status and knowledge in a particular scribal school in Abu Salabikh (present-day Iraq), ca. 2600 BCE, sought to overcome the contingencies and gaps he faced in transcribing an encrypted mythological text (in a code known as UD.GAL.NUN) from nearby Fara (ancient Shuruppak; for background, see Krebernik 1998; Krebernik and Postgate 2009; Visicato 2000, 46–52 and references therein). Even though as little as one or two generations probably separate the source text (from Fara) and its ancient transcription (from Abu Salabikh), the scribal habitus behind the Fara source text is quite different from that of the later transcription. The tradent is forced to resolve problems as he works through the text and even to improvise at times, moments of contingency that illuminate the nature of scribal agency within this particular micro-historical milieu.

THE NEW MATERIALISM

If we are to describe how the artifactual (rather than textual) properties of a text-artifact are produced—namely, the procedures or mechanisms that result in the material remains that latter-day epigraphers study—the best place to start is undoubtedly the newly emergent materialism, in which agency can be attributed to inanimate as well as animate entities, cognizant or otherwise (see the essays in Knappett and Malafouris 2008; Mills and Walker 2008; and Nanoglou and Meskell 2009 for overview and exemplification, as well as Anderson's discussion of Gosden in this volume). This new materialism finds its proximate point of origin—at least within the archaeological literature—in Olsen (2003), in which the author attempts to move beyond the "(material) culture as text" metaphor by attributing agency to various nonhuman and transhuman agents. In doing so, he draws for the most part on network theorists (see the introduction to Knappett and Malafouris 2008) but in particular on

the work of historian of science Bruno Latour (1999, 2003; see Auslander et al. 2009; Martin 2005; and above all Harman 2009 for some context).[2] The relevance of this new materialism is that there are nonhuman actors of various kinds (the neurological structures dedicated to reading, the ergonomics of the clay tablet and the reed stylus, textual formats passed down through the generations, and so forth) and these nonhuman actors interact with and often constrain scribal agency in one way or another.

In dealing with scribal practice, therefore, we cannot draw a simple distinction between human and nonhuman agency, nor can we simply juxtapose material constraints to ideational ones. Those practices that we term "inculcated scribal habitus" (processes that are largely automatic and not subject to much in the way of conscious decision making once training is complete) should really be grouped with purely material constraints such as the density of the clay that is used to form a writing surface or the neurobiological structures that decompose and interpret complex written characters (see Dehaene 2009). The real difference between inculcated scribal habitus and other material constraints is that inculcated scribal habitus is taught to would-be scribes through years of rote training, localized in particular scribal schools and maintained by elite members of the same scribal academies (see the discussion of doxa in our conclusion). This type of imbrication of the human and the nonhuman, as well as the material and the ideational, is particularly characteristic of Latour's materialism (see Latour 1994; on the Latourist occasionalism in the background, see Harman 2009, 29, 80–83).

Once we recognize that these different types of constraint (human vs. nonhuman, material vs. ideational) fully interpenetrate one another, we need a terminology for describing these phenomena that looks at scribal practice as a synthetic whole. The notion of *aesthetic profile* as defined by Cancik-Kirschbaum and Mahr (2005) is a particularly useful model for the many different ways in which a text can be inscribed within the confines of the text-artifact. Cancik-Kirschbaum and Mahr first define an allocation (*Allokation*) as a distribution of distinctive orthographic elements within particular, demarcated positions on the surface of a text-artifact. The configuration of orthographic elements and the configuration of demarcated spaces on the writing surface serve as the two basic axes of text-artifactual structure. Thus, for example, "a written word is an allocation of letters on a piece of paper, a text an allocation of words on the page of a book, a memorized poem an allocation of lines and strophes, a magic square an allocation of numbers or the imaginary, the endless tape of a Turing machine an allocation of symbols belonging to the tape alphabet" (Cancik-Kirschbaum and Mahr 2005,

97). These different kinds of *text* need not be meaningful or even coherent: the letters may only represent gibberish, the distribution of words within lines and strophes need not yield real poetry, and so forth. Moreover, these two dimensions of text-artifactual structure (the relations between orthographic elements [*Symbolbeziehung*] and the relations between delimited surfaces [*Ortsbeziehung*]) need not be coordinated in any way, as seen in "random" allocations that occupy otherwise meaningful surfaces, such as TV static or a sequence of random numbers. Only under the further constraint of an *Anordnung* ("configuration" or, better, "ordering with respect to [other allocations]"), in which the syntagmatic structure of the demarcated spaces within the writing surface act in concert with a selection of orthographic units extracted from their own paradigmatic structures, can we speak of meaning, function, or coherence in a text-artifact (Cancik-Kirschbaum and Mahr 2005, 97–98).[3]

The aesthetic profile of an Anordnung as instantiated in a given text-artifact refers to those features of the Anordnung that are determined or driven by economies of use in context. The aesthetic profile of "a receipt, for example, is determined by the size and format of the receipt itself, the paper and pencil as materials of the medium of communication, the orthographic elements as carriers of information, the sequential listing of each purchase, and perhaps even the purely aesthetic aspects of its configuration and graphic form" (Cancik-Kirschbaum and Mahr 2005, 102). Given the emphasis on configuration and juxtaposition (as opposed to the largely one-dimensional character of a textual string when defined in phonological terms), aesthetic profile can also be seen as capturing the diagrammatic character of the text-artifact. This aspect of textuality becomes particularly clear in notational systems that lack a denotational component in the strict sense of the term (see Johnson 2007, as well as Jackson's discussion of "semasiographic notation" in this volume).

THE AESTHETIC PROFILE OF UD.GAL.NUN

UD.GAL.NUN refers to a code in which a given cuneiform sign is replaced by another sign to which it is related either semantically or in terms of its orthographic form. Thus, in Figure 7.1, the sign on the bottom that resembles a star (AN), which is normally used to mark divine names (indicated by superscript ^{d}) is replaced by UD (on the top), whereas the two remaining elements represent the name of Enlil, the chief deity throughout much of early Mesopotamian history: EN =

GAL and LIL_2 = NUN. This yields the equation that gives the replacement code its name ($^{d}EN.LIL_2$ = UD.GAL.NUN). We do not seek in this chapter to achieve any further decipherment of the code itself but rather to describe some principles that underlie the configuration and sequencing of cuneiform signs within a given demarcated space on the writing surface (viz. their deposition within the text-artifact).[4] Crucially, the earlier phases of cuneiform writing (prior to ca. 2500 BCE) are largely nonlinear: individual cuneiform signs are *not* regularly arranged in linear strings that mirror their position within the phonological string of uttered speech; instead, they are grouped in semantically meaningful clusters. Previous investigators have often spoken, informally, of Early Dynastic IIIa sign configuration as "random" or "meaningless," and even in Biggs's initial description of UD.GAL.NUN, he speaks of the Abu Salabikh sign configurations as "arbitrary" (Biggs 1966, 75–76). We suggest, however, that a broader perspective on third-millennium orthographies—rooted in the neurobiology of reading (Dehaene 2009; Dehaene and Cohen 2007) rather than our own traditions of alphabetic literacy—would take the clustering of orthographic elements in the Early Dynastic materials as simply one concrete phase in the history of sign clustering in third-millennium cuneiform materials.

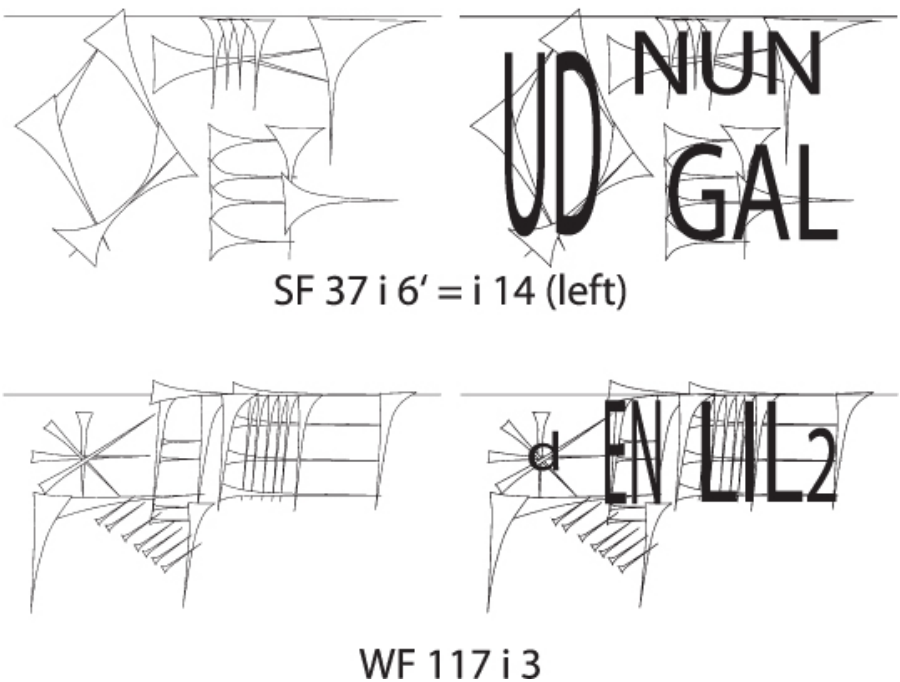


FIGURE 7.1. UD.GAL.NUN (*above*, SF 37 i 6' = i 14, approx. 8 x 15 mm) as the encoded UD.GAL. NUN version of $^{d}EN.LIL_2$ *(below,* WF 117

i 3): UD = d(inger), determiner for deities; GAL = EN; NUN = LIL_2.

The first component of any aesthetic profile is the configuration of cases, lines, or other subsections delimited within the writing surface (*Ortsbeziehung*). More so than in later phases of cuneiform writing, third-millennium texts exhibit an exuberant variety of tablet formats, patterns of rotation, and subcompartmentalization for encoding levels and types of metadata (Englund 1998, 56–64). Although UD.GAL.NUN materials make use of the same standard configuration of cases (or lines) arranged in columns as other Early Dynastic materials, the particular subcorpora that are under discussion here also frequently inscribe a faint guideline down the center of each column.[5]

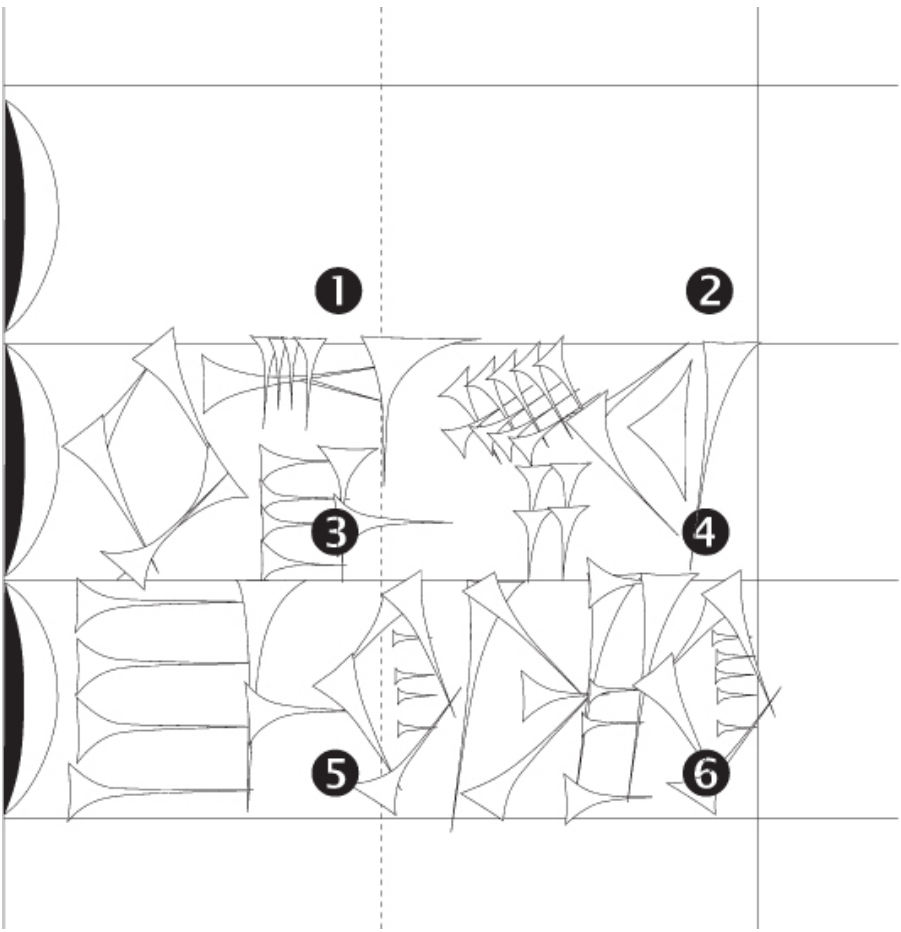


FIGURE 7.2. Three cases are broken up into six half-cases by a faint guideline (dotted in the figure) so that each horizontal case consists of two half-cases, such as (1) and (2). In the left half-case of the second line (3), we have $^{d(UD)}$en(GAL)-lil(NUN), "Enlil" (the chief deity of Mesopotamia), whereas the three remaining half-cases are each occupied by a separate word or phrase: (4) ama(TU) a(ZA), "(whose)

mother and father” (are) (5) en(GAL)-ki “Enki” (and) (6) nin-ki “Ninki” (SF 37, obv. i 6’–7’ = 14–15, approx. 17 x 25 mm, translation Zand).

As in Figure 7.2, the central guideline breaks each case into two slightly irregular squares and, as a rule, clusters of semantically related cuneiform signs are often configured within a single square. In Figure 7.2, the divine name Enki is written as a nonlinear cluster in its UD.GAL.NUN orthography (viz. UD.GAL.UNUG = /enkik/ [the phonological string corresponding to the divine name Enki]) on the left side of the second case. This clustering of signs is analogous, of course, to the ideal square that plays such a central role in the history of East Asian scripts, and the neurobiology of logographically mediated writing underlies the history of Ortsbeziehung in both regions.[6]

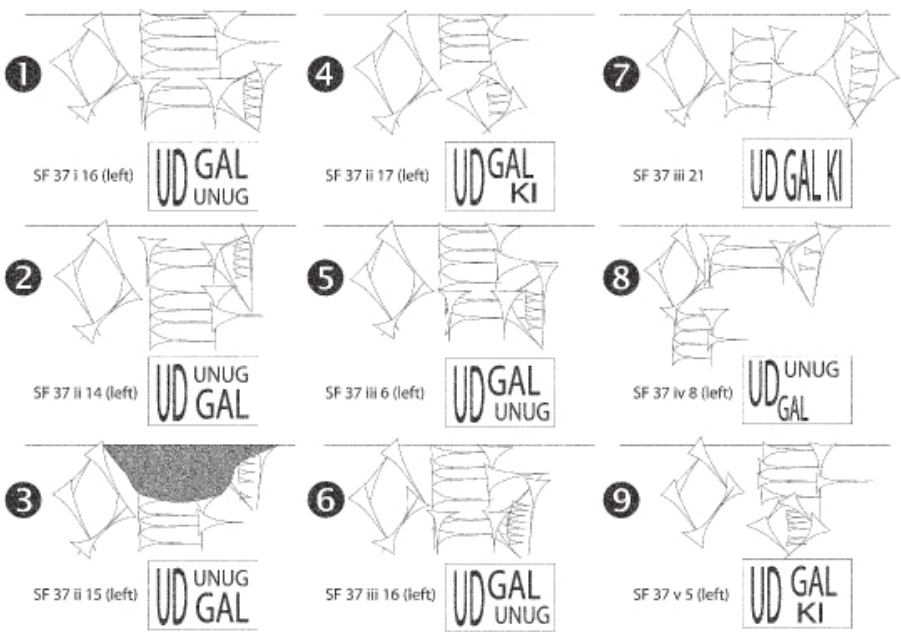


FIGURE 7.3. First nine occurrences of the divine name Enki (written UD.GAL.UNUG/KI) in SF 37. Below each cluster of cuneiform signs, a schematic transliteration of the cluster appears in a box. Both the elements used to write the name (UNUG vs. KI) and the configuration of the elements within the left half-case vary depending on the configuration of other orthographic elements in the same case (not shown here). Each half-case is approximately 8 x 15 mm.

CLUSTERING IN UD.GAL.NUN

Even once a grid of columns, cases, and half-cases is imposed on the

writing surface, the inculcated scribal habitus of the UD.GAL.NUN texts seems, at least in part, to reach down into the configuration of individual cuneiform signs within a given half-case (see Jackson on sign clustering as well as Smith on "emergent combinatorial substructure," both in this volume). This becomes particularly clear if we assemble a representative sample of the variant forms of the divine name Enki (the most commonly occurring sign cluster in SF 37, our primary source text in this chapter), as in Figure 7.3.

Although the UD.GAL.NUN value UNUG = /ki/ is occasionally replaced by the ordinary sign value KI = /ki/ in a few examples (nos. 4, 7, and 9 in Figure 7.3), for the most part Enki's name is written with the three cuneiformsigns UD, GAL, and UNUG. In only one of the nine instances reproduced in Figure 7.3 is Enki's name written in linear fashion (no. 7), and in that case, there is only one other element within the line: GAR.[7] The only other examples in which a single cuneiform sign occurs in the same case as Enki's name are no. 2 and no. 3, and in both cases the scribe clustered Enki's name inside the left half of the case: UD on the far left with UNUG above GAL in both examples. Thus, when there is only one other cuneiform sign in a given case, the scribe appears—at least upon initial inspection—to have a certain freedom in assigning signs their position within the case. When, however, two or more cuneiform signs other than the signs that make up Enki's name appear in the same case, this apparent freedom of placement and configuration largely disappears: nos. 1, 4, 5, 6, 8, and 9 all include two or more signs besides Enki's name (UD.GAL. UNUG) and in each case, UD.GAL.UNUG forms a cluster within the left half of the case.

Although the general configuration of the signs that form Enki's name (excluding the linear examples) is the same in each half-case—namely, UD on the left with the remaining two signs stacked on the right—the clusters differ in their placement of GAL and UNUG: in nos. 1, 4, 5, 6, and 9, GAL is written above either UNUG or its decoded equivalent KI, whereas in nos. 2, 3, and 8, UNUG is written above GAL. Thus, we can state a generalization: when Enki's name is written in the same case as another word (itself made up of two or more cuneiform signs), Enki's name is normally written within a half-case such that UD is on the left, whereas GAL is above UNUG on the right (nos. 1, 4, 5, 6, 9). Where only one other sign occurs besides Enki's name, as in nos. 2, 3, and 7, UNUG is written above GAL or the signs are written in linear sequence (itself innovative within this textual tradition).[8]

SEQUENCING WITHIN UD.GAL.NUN CLUSTERS

One aspect of the habitus of UD.GAL.NUN scribalism that has been largely ignored in previous work is that within the overarching pattern of a given sign cluster (see above), it is also sometimes possible to identify the sequence in which individual cuneiform wedges were impressed so as to form individual cuneiform signs as well as the sequence in which individual cuneiform signs were inscribed within a given cluster (see Edzard 1980; Jackson, this volume). The impression of the reed stylus into a surface made up of still plastic clay often results in not simply an impression in the surface of the tablet but also the displacement of a volume of clay. This displaced material often produces distortions in the immediately surrounding clay surface. This is particularly evident when the impression is made at an oblique angle (relative to the resting position of the stylus in the scribe's hand) or the surface of the clay tablet is already disturbed by previous impressions. Needless to say, the distortion that later wedges cause in earlier wedges is often quite subtle and difficult to capture in hand copies or photos. Nonetheless, careful examination of how the impression of individual cuneiform wedges affected other previously inscribed wedges can sometimes indicate the sequence in which individual cuneiform signs were inscribed.

If we return to the set of examples (renderings of the god Enki's name) dealt with in the previous section, one can imagine two rather different scenarios: either the three orthographic elements that form Enki's name were always written in the same sequence (UD > GAL > UNUG) regardless of their placement within a cluster, in which case we could hypothesize that the sequence (UD > GAL > UNUG) mirrors the phonological string {$^{d(UD)}$en(GAL)-ki(UNUG)} = 'Enki', or we can imagine that the order of inscription is fixed for a given configuration (left > upper right > lower right) and that this configuration could be filled out by one of two distinct sequences: either (UD > GAL > UNUG) or (UD > UNUG > GAL). The first of these possibilities argues for a fixed sequence of orthographic elements (Symbolbeziehung), whereas the second possibility suggests a fixed arrangement of delimited surfaces within a configuration (Ortsbeziehung) into which a variable sequence of orthographic elements (Symbolbeziehung) can be placed. There are at least fourteen separate occurrences of Enki's name on the obverse of SF 37 (i 16, ii 14, ii 15, ii 17, iii 6, iii 16, iii 21, iv 8, v 5, v 8, vi 3, vii 4, vii 19), as well as at least one occurrence of the same three cuneiform signs in an

entirely different configuration where Enki's name is not represented (SF 37 vii 15).[9] Although we hope to apply more advanced microscopic imaging techniques to these occurrences of Enki's name in the future, naked-eye observations at present only allow the sequence of eight occurrences to be determined with any degree of certainty.

As Table 7.1 clearly shows, the order of inscription was left > upper right > lower right in every example that provides evidence for inscriptional sequence. Five of these eight examples (nos. 1, 5, 6, 9, and 11) are just as we might have expected: the sequence of signs that corresponds to the presumptive phonological string ({$^{d(UD)}$en(GAL)-ki(UNUG)} = 'Enki') is mapped into the tripartite configuration of the cluster (left > upper right > lower right) in a straightforward way (UD_{left} > $GAL_{upper\ right}$ > $UNUG/KI_{lower\ right}$). In only three examples (nos. 2, 8, and 10), in bold in Table 7.1, does the sequence of inscription (UD_{left} > $UNUG_{upper\ right}$ > $GAL_{lower\ right}$) not conform to the presumptive phonological string ({$^{d(UD)}$en(GAL)-ki(UNUG)} = 'Enki'). Furthermore, given the fact that no. 2 is one of the three examples in which Enki's name is accompanied by only a single other cuneiform sign, it does at least raise the possibility that UNUG and GAL were written in the sequence UD_{left} > $UNUG_{upper\ right}$ > $GAL_{lower\ right}$ to show that Enki's name formed a single word *in combination with* the other cuneiform sign in the case, namely GAR. The other two examples in which GAL and UNUG are inverted seem to be motivated by other factors: inversion in no. 8 largely results from the fact that two other words (made up of four cuneiform signs in total) are included in the same case, whereas the inversion in no. 10 was meant to avoid confusing Enki's name (UD.GAL.UNUG) with that of Enlil (UD.GAL.NUN), since the NUN sign occurs in the upper right corner of the same case.[10]

TABLE 7.1 Evident sequences of UD.GAL.UNUG in SF 37 (numbers in the left-hand column [through no. 9] correspond to the numbering in Figure 7.3; no. 7 is excluded as linear)

No.	*Sequence*
1	UD_{left} > $GAL_{upper\ right}$ > $UNUG_{lower\ right}$
2	**UD_{left} > $UNUG_{upper\ right}$ > $GAL_{lower\ right}$**
5	UD_{left} > $GAL_{upper\ right}$ > $UNUG_{lower\ right}$
6	UD_{left} > $GAL_{upper\ right}$ > $UNUG_{lower\ right}$
8	**UD_{left} > $UNUG_{upper\ right}$ > $GAL_{lower\ right}$**
9	UD_{left} >; $GAL_{upper\ right}$ > $KI_{lower\ right}$
10	**UD_{left} > $UNUG_{upper\ right}$ > $GAL_{lower\ right}$**
11	UD_{left} > $GAL_{upper\ right}$ > $UNUG_{lower\ right}$

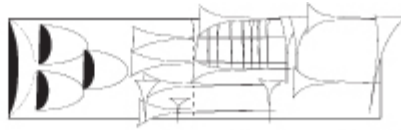
Although we cannot draw any definitive conclusions about

sequencing within the aesthetic profile of UD.GAL.NUN as a whole, our preliminary investigation of UD.GAL.NUN sequencing does suggest a fixed configuration and sequence of inscription (left > upper right > lower right) for Enki's name, in which two different strings of cuneiform signs could be written: either UD_{left} > $GAL_{upper\ right}$ > $UNUG_{lower\ right}$ or UD_{left} > $UNUG_{upper\ right}$ > $GAL_{lower\ right}$. If this type of variation can be further substantiated with other concrete examples, it suggests that the apparent freedom that an individual scribe had in the placement of individual signs within a cluster might be a chimera. This type of variation, in which the order of orthographic elements can be altered *so as to contradict the phonological sequence,* may simply be an additional layer of inculcated scribal habitus, perhaps meant to indicate whether or not a second distinct word occurs in the same case.

TRANSCRIBING AND GLOSSING IN UD.GAL.NUN

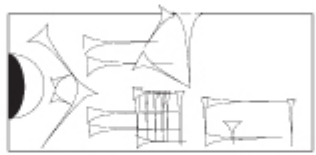
Although the foregoing sections have dealt with learned but largely unconscious or at least automated knowledge (inculcated scribal habitus), this last section asks how a well-trained scribe—fully conversant with and indoctrinated into the scribal practices outlined in the previous sections—would deal with a gap or moment of contingency within a received text. Faced with an insuperable gap in the text or a scribal muddle that the tradent cannot decipher, what is a scribe to do? The identification of a gloss added to a previously existing text that is being recopied represents an important moment in the UD.GAL.NUN textual tradition, since it suggests that (1) the primary purpose of the UD.GAL. NUN cipher was not secrecy per se, at least in the later parts of the tradition, but also (2) that there are textual contingencies that later scribes did not fully understand and that they sought to repair these contingencies through innovation or even improvisation.

Source:
(SF 37 ii 20)



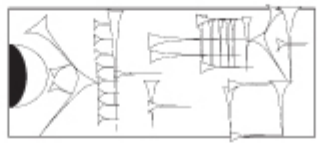
kur ummeda(MES) $ba_4(GA_2)$-gen(LAGAB)

Transcription:
(IAS 114 ii 5a')



kur(UD) ummeda(MES) $ba_4(GA_2)$-gen

Gloss:
(IAS 114 ii 6')



kur(UD) um-me-da(GAL) ba-gen(LAGAB)

FIGURE 7.4. Source, transcription, and gloss to SF 37 ii 20 (7 X 26 mm): the source stems from Fara (ancient Shuruppak), a generation or so earlier than the transcription and gloss from Abu Salabikh (IAS 114 ii 5a'+6').

The text we have dealt with in the previous sections (SF 37) comes from Fara and is written in a slightly earlier orthography than the duplicate from Abu Salabikh (IAS 114). It should be emphasized that both texts date to the ED IIIa period (ca. 2600–2500 BCE) and that it is difficult to fix any absolute dates for either the texts from Fara or those from Abu Salabikh. Nonetheless, there is a widely held view that the paleography of the Fara texts is approximately a generation or two older than that of the Abu Salabikh texts.

In Figure 7.4, we have the first of the two glossed lines that we discuss here (the lines occur in sequence in SF 37—namely, lines ii 20 and ii 21a—and the transliteration of these two lines occupy a single line in the later version from Abu Salabikh, namely, IAS 114 ii 5'.[11] The two "lines" in SF 37 that IAS 114 glosses actually consist of (i) SF 37 ii 20 and (ii) the three signs GA_2, LU_3, and NAM_2 in the upper center (GA_2) and right corner (LU_3 and NAM_2) of SF 37 ii 21; the remaining signs within SF 37 ii 21 constitute a third "line" and, if glossed at all in IAS 114, correspond in some way to IAS 114 ii 8'–9' (not dealt with here). The Abu Salabikh text then glosses each of the two lines separately in IAS 114 ii 6 and 7, respectively: SF 37 ii 20 is glossed by IAS 114 ii 6, whereas SF 37 ii 21a is glossed by IAS 114 ii 7. We have broken the materials down into SOURCE,

TRANSCRIPTION, and GLOSS: in Figure 7.4, SOURCE corresponds to SF 37 ii 20', whereas TRANSLITERATION and GLOSS correspond to IAS 114 ii 5a' and 6'.

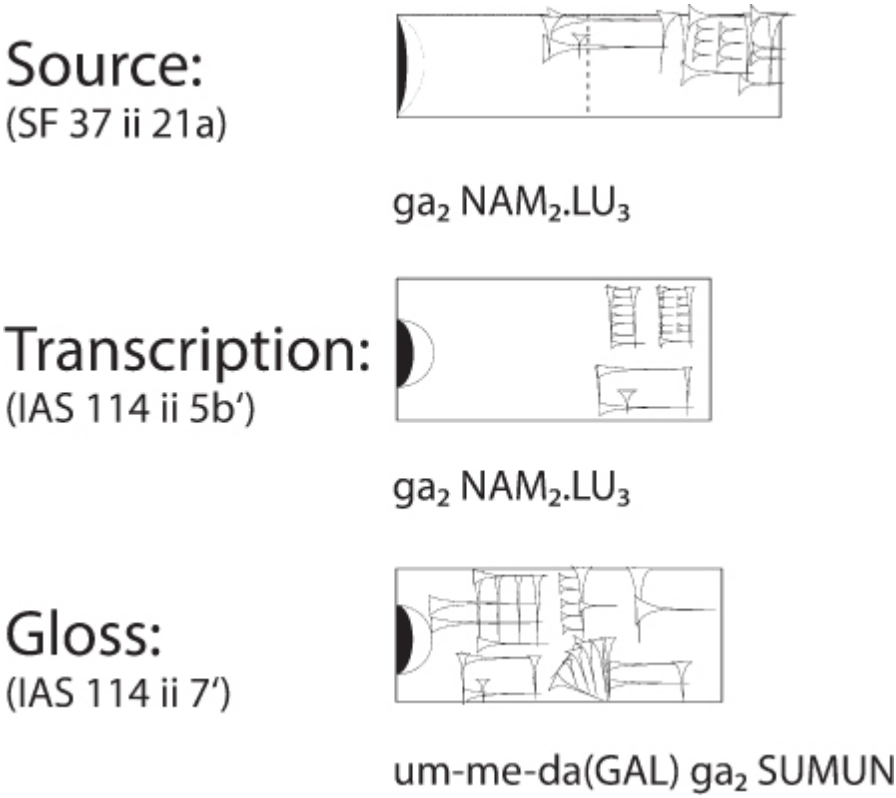


FIGURE 7.5. Source, transcription, and gloss to SF 37 ii 21a (6 X 19 mm): the source stems from Fara (ancient Shuruppak), a generation or so earlier than the transcription and gloss from Abu Salabikh (IAS 114 ii 5b'+7').

Likewise, Figure 7.5 represents the second glossed line, which follows immediately after the first. If we then put the two lines in sequence, we arrive at something like the following:

SF 37 ii 20–21a (SOURCE)
kur ummeda(MES) $ba_4(GA_2)$-ĝen(LAGAB) / ĝ**a**$_2$ $NAM_2.LU_3$

IAS 114 ii 5' (TRANSCRIPTION)
kur(UD) ummeda(MES) $ba_4(GA_2)$-ĝen' <ĝ**a**$_2$> NAM_2'.LU_3

IAS 114 ii 6'–7' (GLOSS)
kur(UD) um-me-da(GAL) ba-ĝen(LAGAB) / um-me-da(GAL) ĝa_2 SUMUR

The transcription in IAS 114 ii 5 does not repeat the second GA_2

found in SF 37 ii 21a, which we have put in bold above and reconstructed as <ĝ**a**$_2$> in IAS 114 ii 5'. However, it is likely that the single GA$_2$ in the transcription in IAS 114 ii 5' was meant to be applied to both lines. Notice, in particular, that GA$_2$ in IAS 114 ii 5' is adjacent to both the three other signs in the first line (KUR MES DU in Figure 7.4) and the two signs that form the second line (NAM$_2$ LU$_3$ in Figure 7.5).

The crux of the gloss lies in the interpretation of the "MES" sign as a logographic writing for {um-me-da(GAL)} as well as the fact that the MES sign is not repeated in SF 37 ii 21a.[12] Half a millennium later in standard Sumerian literary texts, the word {ummeda} is fairly common and means 'nursemaid' (written UM.ME or UM.ME.DA). The semantic link that the scribe who wrote these glosses seems to have built on is the fact that nursemaids tend to be young women, whereas the apt meaning of {mes} in later Sumerian is 'young man' (Akkadian *eṭlu* as apparently in Gilgamesh's name {bil$_3$-ga-mes}; see George 2003, 74—75). This yields a fairly straightforward translation of the two lines:

SF 37 (ummeda(MES) ba$_4$-ĝen(LAGAB)
IAS 114 (um-me-da(GAL) ba-ĝen(LAGAB)
The young woman went to the netherworld.
SF 37 (ummeda(MES) ĝa$_2$) NAM$_2$.LU$_3$
IAS 114 (um-me-da(GAL) ĝa$_2$ SUMUR
I, the young woman, am . . .

These lines are reminiscent of the decisive narrative moment in *Inanna's Descent to the Netherworld:* lines 26 and 32 from the ETCSL edition with an intervening dialogue with her vizier omitted read as follows:

> 26) ^{d}inanna kur-še$_3$ i-im-ĝen . . . 32) u$_4$ -da kur-še$_3$ e$_{11}$ -de$_3$ -en
>
> *Inanna went to the netherworld. . . "Today I descend to the netherworld."*

If we have understood these glosses correctly, however, the scribe who wrote IAS 114 seems to have overreached: MES never corresponds to a young female in the later language (see Marchesi 2004, 191–93, 197). Moreover, the generic milieu in which SF 37 was presumably situated (mythological backing for an Eridu Theology, cf. *Enki and the World Order,* lines 166–81 [Averbeck 2003; Hallo 1996]) has relatively little to do with *Inanna's Descent to the Netherworld,* although Inanna does make an appearance at the end of *Enki and the World Order*.

Even if the parallel suggested here eventually falls through, the

gloss in IAS 114 does make use of a narrative structure that is very similar to that of *Inanna's Descent to the Netherworld:* whereas IAS 114 ii 6' reads the first GA_2 in Figure 7.4 as the verbal prefix *ba- (typically associated with third-person narrative functions as a medio-passive prefix; see Woods 2008), the scribe of IAS 114 leaves the second occurrence of GA_2 in the gloss in Figure 7.5 unchanged, suggesting perhaps that the second line of the gloss be read as {ĝa$_2$ um-me- da(GAL) SUMUR} "I, the young woman, am . . ." Whatever the interpretation of the verbal root $NAM_2.LU_3$ (SF 37) = SUMUR (IAS 114), the fact that the same cuneiform sign in SF 37—that is, GA_2—is glossed differently in the two lines (as a third-person verbal prefix in IAS 114 ii 6' but as a first-person independent pronoun in IAS 114 ii 7') strongly suggests that the scribe who wrote these glosses into IAS 114 was attempting to fix a particular interpretation of an otherwise ambiguous passage.

What then does a gloss like this tell us about the possibility of individual scribal agency and innovation in the UD.GAL.NUN materials? Greg Urban, in an important study of transcription practices among native fieldworkers investigating the mythological texts of the Shokleng of Brazil, has formulated several principles that regulate the degree to which an original text must be replicated exactly as it stands, or alternatively the degree to which the copyist can "answer" or respond to the original text (Urban 1996). Urban isolates two factors that largely determine the degree of replication: (1) the degree to which the author of the text in question is seen as its original creator, and (2) the difference in social power between the source of the text and the replicator.

If we carry over Urban's framework, it is clear that the scribe from Abu Salabikh has more or less carefully (see note 12) preserved the original form of the line in his transcription in IAS 114 ii 5'. So, at least for the two lines we have dealt with here, the scribe from Abu Salabikh has adopted the social role of a tradent rather than an originator, while appending his own interpretation in separate lines and, crucially, in a *normal orthography* that could easily be distinguished from UD.GAL.NUN. This seems to contradict the impression one receives from other parts of SF 37 and its duplicates, namely, that the scribe of IAS 114 rather freely changed the received text so as to (re)form a coherent textual tradition. Where the Abu Salabikh scribe alters the source text without making use of the type of transcription plus gloss format that we see here (the ubiquitous shift from the verbal prefix mu- in SF 37 to mu(NUN)- in IAS 114, for example), he is clearly relying on a *conventional mapping* of the aesthetic profile of UD.GAL.NUN in Fara into the aesthetic profile of UD.GAL.NUN in Abu Salabikh. In other words, even within the

general parameters of Urban's model, we must also make room for standardized orthographic equivalencies that exhibit no real agency: solid conventions exist, and what Bourdieu termed *doxa* ("activities … so thoroughly regularized that their pursuit cannot be considered agency as they are deprived of intention" [Smith 2001, 157–58]) need not be transgressed. Nevertheless, as we have seen, there are also moments when no standard orthographic equivalency is available and the scribe must improvise.

The importance of glosses such as this is that they provide a window into the social structures in which scribes received and copied text-artifacts, faced contingencies, and introduced innovative readings into the textual tradition. However, these moments of innovation must always be contrasted with the several layers of inculcated scribal habitus described in the first half of the chapter (tablet formation, the fixed sequence of impressions that form an individual cuneiform sign, and the sequencing and clustering of cuneiform signs to code words and phrases). Only once the limits of the scribal habitus are reached—when the scribe encounters a gap or incongruity and is forced to introduce a gloss—do other dimensions of scribal agency become apparent, such as the position of the scribe within contemporary hierarchies of scribal practice (master scribe as opposed to trainee), as well as what we might call a hierarchy of scribal schools and traditions (texts inscribed by experts at a scribal center in a "golden age" as opposed to standardized texts recopied by later tradents working in the periphery). If agency theory is to be of any use in future work, it must itself undergo a decomposition in which multiple layers of inculcated scribal habitus (rooted in a wide variety of actors, from neurons to the plasticity of clay) are linked to locally defined aesthetic profiles such as the two aesthetic profiles for UD.GAL.NUN described in this chapter.

Even with such a decomposition, however, Bourdieu's notion of agency as action that transcends a false naturalization of practice (viz. doxa) still fails to recognize the significance of these moments of innovation in which an anonymous scribe, for better or worse, transcends ordinary scribal practice in order to repair a received text and thereby reestablish the doxa itself (see the critiques of doxa in Smith 2001, 158–60, and Dornan 2002, 305–7, 318–19). Given these critiques, we should probably follow Parmentier in recognizing a "division of semiotic labor" in which "non-elites, elites and esoteric specialists" occupy particular positions within the scribal hierarchy: "[t]he first group [= non-elites] operates largely according to unreflective *habitus*; the second group [= elites] establishes official *doxa*; and the third group [= esoteric specialists] provides intellectualized rationalizations or even innovative deconstructions of

the society's semiotic activity" (Parmentier 1997, 86). Whether the scribe who introduced the glosses into IAS 114 was a member of the elite rescuing the local scribal doxa from intrusive heterogeneous material or an esoteric specialist intentionally altering a received text to make an implicit commentary on its usual interpretation remains an open question.

ACKNOWLEDGMENTS

This chapter is the result of several collaborations over the past few years, primarily between the two authors as part of a larger project to produce a new edition of SF 37 and duplicates (the primary text dealt with in this contribution) within a framework based on recent advances in the neurobiology of reading. At the same time, the first author is also involved in ongoing collaborative work on the history of writing, notational devices, and geometrical models with members of TOPOI research group D-III-2 (J. Brüning, E. Cancik-Kirschbaum, H. Brunke). The authors thank Beate Salje and Joachim Marzahn for permission to reexamine SF 37 in the collections of the Vorderasiatisches Museum in Berlin.

NOTES

1. The essence of the dilemma is captured best by the series of questions with which Preucel begins his discussion of the "relationships between two kinds of sign vehicles, namely words and things. Should a theory of materiality be subsumed by a theory of language? Should it subsume language? Or should it stand separate from language?" (Preucel 2006, 254). The clear answer to these questions within the branch of linguistic anthropology summarized by Mertz (2007) is that a text (understood as a configuration of indexicals that achieves one or more metapragmatic functions) need not include a (meta)semantic—that is, specifically denotational—component at all (see the discussion of pottery styles as indexical legisigns in Parmentier 1997, 50–51, and Watts 2008, 196), so it would in principle be possible to subsume patterns of material culture and denotational texts within a metapragmatic tertium quid (viz. the interactional text) (cf. Johnson 2007).

2. Olsen's study is precisely the type of metaphorical extension of writing that we are trying to avoid, but we cite it here because of its place in the history of symmetrical archaeologies (similar caveats must also be applied to Latour's metaphorical use of "inscription"). One of the surprising aspects of the recent literature on materialism

and agency is the degree to which it recapitulates earlier discussions of the materiality of the sign in linguistic anthropology: the interest in the "thing[y]ness of things" (Meskell 2004, 13–14; Nanoglou 2009, 157) corresponds quite well to Bakhtin/Voloshinov's interest in the materiality of the linguistic sign (Bakhtin 1986, 60–102; Voloshinov 1973), whereas the reconstruction of network theory on Peircean foundations (Watts 2008) corresponds to Michael Silverstein's redescription of Jakobson's model of metalinguistic function (Silverstein 1976, 1993).

3. Cancik-Kirschbaum and Mahr generally describe an Anordnung as a mapping between two or more distinct allocations, presumably to remain neutral with respect to any hierarchical relations between allocations. Only under the further assumption of a *hierarchical* Anordnung between allocation$_1$ and its (meta)-allocation$_2$ can we draw an analogy between Anordnung and Michael Silverstein's discussion of metapragmatic function and interactional textuality (see Silverstein 1993). Crucially, however, the notion of Anordnung is capable of generalizing over structural possibilities in the text-artifact without committing to a particular (denotationally mediated) reading of the object: the Anordnung of a tax table, for instance, can be described without reading off a particular subset of entries (in **bold**) within an interactional text ("if you made between **$25,500** and **$25,800** last year, then your tax is **$215**").

4. Although many individuals have participated in the identification and decipherment of UD.GAL.NUN, some of the more important contributions are van Dijk 1964 *(avant la* lettre); Biggs 1966, 1974; Krecher 1978; Lambert 1981; Alster 1982; and Krebernik 1984, 267–86; 1998. Kamran Zand is currently preparing a comprehensive treatment of UD.GAL.NUN under the guidance of Krebernik and he kindly made available to us his transliteration and translation of SF 37 and duplicates, which has saved us from several errors.

5. By convention, cuneiform materials are oriented in vertical columns in which lines are read from left to right. Throughout the third millennium, however, the actual orientation of reading was in horizontal rows, in which each case was read *from top to bottom,* the columns proceeding *from right to left,* as in East Asian scripts. It should be noted that there is at least one other use of central guidelines attested in third-millennium cuneiform materials: a group of four Mesag texts from Sargonic Umma (USP 44, 45, 47 and BM 140668; Catagnoti 2003) also makes use of central guidelines. Eva Cancik-Kirschbaum has referred me to a recently published tablet (VAT 6635) that also subdivides columns vertically, although in a formally distinct

way (Krebernik, Marzahn, and Selz 2006).

6. Both the ideal square in the developed form of the East Asian scripts and the "half-case" formed by the guideline in the UD.GAL.NUN materials dealt with here seem to correspond to primary units of analysis within at least two branches of the neurobiology of reading: the saccade and the so-called visual word form area (VWFA). Smith (2008, 88–115, and in this volume) has discussed in considerable detail how these two antipodes of the neurobiology of reading can be identified in the earliest writing phases in China (viz. Oracle bone inscriptions), but no fluent readers of UD.GAL.NUN currently exist (and it is possible that fluent reading never actually arose in connection with encrypted materials such as UD.GAL.NUN), so it is impossible to fix the perceptual span of the saccades structuring our texts. Nonetheless, both of these early systems rely on "a hierarchical pyramid of increasingly large bundles of visual information" rather than the linear open bigrams that structure alphabetic systems (Dehaene 2009, 98).

7. The only other linear sequence of something like Enki's name occurs in i 15, where we find the linear sequence GAL KI NIN KI as a description of Enlil's parents. But the en(GAL)-ki in this line is consistently distinguished from the god Enki in the later lists of god names, and we maintain that distinction here.

8. This sign configuration (UD on the left with GAL and UNUG stacked on the right) may be limited to a single scribal atelier or even a single scribe. It is noteworthy that the scribe who wrote SF 39, another text from Fara that is contemporary with SF 37, extends UNUG across the entire width of the half-case and then puts UD and GAL under the left and right sides, respectively, of UNUG (obv. ii 2 and 3, vi 4, vii 6).

9. The configuration and sequence of the UD, GAL, and UNUG are quite different in this case: GAL on the upper left, UNUG on the lower left, and UD on the right with clear evidence of an inscriptional sequence: GAL > UD > UNUG. Moreover, it is fairly clear that GAL in this case forms a separate word in combination with PA {lu(PA)-gal} 'king', hence its position in the upper left relative to UD and UNUG, so that it is adjacent to PA in the middle of the case.

10. Since the NUN sign appears in the upper right corner in no. 10 (SF 37 v 8), the standard configuration of Enki's name would have placed the three signs that make up Enlil's name (UD.GAL.NUN) in a linear sequence along the top of the case. The inversion of UNUG and GAL in Enki's name was meant to block such a misunderstanding, but the inversion was ultimately ineffective: the Abu Salabikh witness (IAS 114 iv 8') to the same line simply writes Enlil's name in place of Enki's

name and omits NUN.GAL, Enki's epithet. That NUN.GAL was originally an epithet of Enki is made particularly clear by the name of his spouse in later materials: {^{d}dam-gal-nun-na}, literally, "spouse of the GAL.NUN." Whether the replacement of Enki's name with Enlil's was a reflex of the growing importance of Enlil vis-à-vis Enki remains an open question; see Michalowski (1998).

11. The lines from SF 37 were copied by the first author, whereas the copy of IAS 114 is based on Biggs's editio princeps of the Abu Salabikh tablets (Biggs 1974). We have not attempted to reexamine IAS 114 firsthand. There may be one other example of glossing in the text we treat here: IAS 114, rev. i 10'—11': {lu(PA) ka$_5$ diĝir(UD)-⌜kam⌝ = nu ka diĝir(UD)-⌜kam⌝}.

12. There are a host of philological problems that we must largely pass over in silence. First, only the Abu Salabikh witness IAS 114 makes a regular distinction between what we are calling "MES" (the DUB sign with no vertical to the left and four or more verticals inside the body of the sign) and "UM" (the DUB sign with no vertical to the left and only two verticals inside the body of the sign). The signs are carefully distinguished in Biggs's hand copy of IAS 114 and distinction has been maintained in Kamran Zand's working edition of the text, but the identification of these signs is not entirely secure. Second, Zand notes, quite correctly, that the descending oblique in the "DU" sign in IAS 114 ii 5a' would indicate that the sign is KU$_7$ rather than DU and that the number of horizontals in "NAM$_2$" in IAS 114 ii 5b' would favor ŠE$_3$ rather than NAM$_2$ (personal communication, November 2009), but it must be kept in mind that these inconsistencies are in the "transliteration" of the two glossed lines and that accidents of textual transmission (e.g., damage to the source tablets, poor handwriting, unfamiliarity with a foreign ductus) may have obscured the correct form of these signs in the actual source of IAS 114.

PART III

Agency through Writing and Early Texts

EIGHT

Structuration of the Conjuncture *Agency in Classic Maya Iconography and Texts*

JOSHUA ENGLEHARDT

In recent years, archaeologists have incorporated the concept of agency into their analyses and reconstructions of past social behaviors. A focus on the intentions behind and consequences of individual action has flourished, despite some confusion as to what agency is or should be (Dobres and Robb 2000, 9; Dornan 2002; Robb 2001, 2010). In this chapter, I employ an agency approach to examine textual and iconographic evidence regarding the much disputed Teotihuacán "arrival" in the Maya lowlands in AD 378, an event known as the *entrada* (Bove 1991; Braswell 2003a, 2003b; Englehardt 2005; Stuart 2000). I am interested in the objective strategies of the social actors involved in this historical event as well as the structural effects of their actions, intentional or otherwise. Although the textual evidence at my disposal allows for the identification of historical individuals and illuminates elite political strategies, it also permits an appreciation of the social structures that provide a framework for the cultural meaning of individual action. Moreover, the textual data are an excellent means through which to gauge the potentiality for human action to stimulate structural transformations. The evidence surrounding the entrada thus permits a combination of two traditional approaches to the agency concept: individual elite strategy and the role of social actors in the structure-event dialectic. I seek to illustrate how a text-based perspective on agency, using these specific data and in this particular historical context, has the potential to inform interpretations of both the intentions and motivations behind individual social practices in the past, as well as the sociostructural consequences of those actions.

I first briefly explore the rationale behind the text-based theoretical approach to agency that I utilize. I then outline the structural-

historical context of the entrada and examine the individuals involved in the event itself at Tikal. In the discussion that follows, I argue that the social actors or agents described in Classic Maya texts at Tikal and elsewhere wielded symbolic as much as coercive power. These texts thus provide a window into the strategic intentionality behind the actions of certain Maya elites within a particular historical context. Acting with historically specific intentions and motivated by calculated self-interest, the individuals involved in the entrada and its aftermath manipulated both symbolic representations and the content of the texts themselves to establish and maintain sociopolitical power within the changing structural dynamics of the Early Classic period Maya lowlands. In doing so, these agents fused conflicting ritual and sociopolitical roles, renegotiating their identities, the cultural meanings of the artifacts themselves, and the dynamics of lowland Maya sociopolitical power. As a result, agents transformed social realities, playing integral, albeit somewhat unconscious roles in structural change. At the same time, shifting structural contexts that sprang from material cultural and representative negotiations of the entrada itself altered the ways in which Early Classic period lowland Maya social actors presented themselves and attributed cultural meaning to their actions.

Analyzing the iconographic and written texts associated with the entrada from a structural-historicist perspective (Kirch and Sahlins 1992; Sahlins 1989, 1995) provides a more nuanced understanding of the event and its consequences by explaining the intentions and motivations of human agents—as well as the consequences of their actions, intended or otherwise—in terms of a conjunctive renegotiation of history and re-creation of social reality through opposed Teotihuacán and lowland Maya cultural projects. An agency approach thus permits additional avenues of analysis for a singularly important event in lowland Maya political history. In addition, the textual evidence under consideration illuminates debate surrounding the concept of social agency and its utility in archaeological and epigraphic inquiry, ultimately offering a deeper elucidation of agency theory itself. In this case, recognizing agency more precisely situates individual actions within larger sociohistorical contexts of interaction, domination, and factional competition (Brumfiel 2003; Joyce 2000, 83; Pauketat 2000, 2001; Silliman 2001), thus adding to our understanding of the historically particular subjectivities of past social actors.

AGENCY IN INTENTIONALITY,

SYMBOLIC POWER, AND SOCIAL REPRODUCTION

I employ an approach to the agency concept that stems from practice theory (Bourdieu 1977, 1989; Giddens 1979, 1984) and structural historicism (Sahlins 1989, 1995; cf. Wang, this volume; Nakassis, this volume). Agency approaches based on practice theory stem from the structure-event dialectic and are predicated on the assumption that individuals enact, embody, or represent cultural traditions in ways that continuously alter those traditions and give them new values out of the pragmatic context (Bourdieu 1977; Dornan 2002, 303; Giddens 1979; Hodder 2000, 22-23; Joyce 2000, 71; Sahlins 1989, 72; 1995, 71). In this light, individual social actions are both constrained and enabled by structure, contextualized through a range of cultural conventions and resources that precede them and provide them meaning and opportunity (Giddens 1979, 1984; Silliman 2001, 192). It follows that the intentions and motivations behind individual action are shaped by the historical moments in which the negotiation of social structure occurs. History itself, however, is neither the abstract succession of cultural structures nor the transitions between structures, institutions, and organizations; rather, it is the construction of culture through individual practice (Pauketat 2001, 86—87). If agency may be identified in the temporal intersection of individual intention with resistance to or incorporation of particular social structures, then social actors may be viewed both as individuals with specific goals and subjective motivations that act strategically to advance their own interests *and* as products of historical moments that reflect the continual negotiation of cultural structure and relations (Dornan 2002, 324; cf. Silliman 2001, 192). Examining the dynamics of the interplay between practice and structure in this way allows for a reevaluation of the traditional selfconceptions of social actors and an appreciation of both the motives and the consequences of agentive actions (Barrett 2000, 62, 65; Sahlins 1989, 35).[1]

Although the motivations behind social action are often of a contextually particular nature, the historical efficacy of persons, events, and the material objects they create lies in their cultural meaning, in other words, their symbolic value (Sahlins 1989, 7; cf. Pauketat 2001, 87). Insofar as the interplay of structure and event is a symbolic process (Gillespie 1999, 225; see also Sahlins 1989, 31), I suggest that the practice of material production in this context is intricately linked to what Bourdieu (1989, 16, 22-23) has labeled "symbolic power," defined as the ability to redefine or re-create a social reality. Material goods exercise active roles in negotiated social

values by engaging the human mind through action, helping to create or constitute new concepts or values (Clark 2004, 205—6). Material artifacts, including iconography and texts, insofar as they exist as products of behavioral practice, are thus both cause and effect of the structure-event dialectic, because the symbolic ideas and cultural categories they represent become intertwined with agentive decisions in generative ways (see Anderson, this volume; Carrasco, this volume). In other words, ideas themselves may be represented by objects, and the same objects can effect new ideas, symbols, and meanings not previously instantiated in material goods (Clark 2004, 208; see also Pauketat 2001, 74). The revision of cultural tradition in this instance may not be the result of a deliberate or premeditated decision on the part of any individual. Rather, once we disengage the idea of strategy from intentionality we are able to understand more fully the intersections between motivation, historical practice, and behavioral process (Pauketat 2001, 79—80). In this sense, while intentionally acting with the motivation to advance strategic self-interests, individual agents, consciously or unconsciously, produce and reproduce symbolic complexes encoded in material artifacts, a process that has the potential to transform social realities through a renegotiation of history.

Such potential stems from the fact that human action is played out against a structural background that acts as both a resource and a constraint on the specific goals of social actors. Moreover, the structural referents that guide individual practice are open to unpredictable or variable historical circumstances, a situation that may produce structural alterations unrelated to the intentions or motivations that underlie the actions of social agents (Pauketat 2001, 80; see, e.g., Sahlins 1989). In the "practical politics" of negotiating social position, power, and identity in practice, political actors may variously reproduce, modify, or reject society and material culture as a way of achieving desired outcomes or effecting unintended structural consequences (Blanton et al. 1996, 2; Silliman 2001, 194—95). In this sense, sociopolitical power is not an abstracted set of inflexible propositions but rather the tangible consequence of interaction between human actors (Giddens 1984, 29). Such power derives from these very processes of reproduction, modification, and rejection of the symbolic complexes represented in material culture (Houston and Stuart 1996, 308). The production of material goods is both dependent on the motivations behind individual action and intended representations and itself a social negotiation that may alter cultural meanings, identities, or relationships. These negotiations invariably re-create structural traditions, insofar as such traditions exist only through practice itself (Giddens 1979, 5; Pauketat 2001, 80,

88).

Understanding agents and the intentions and consequences of their actions as socially molded constructs helps us to understand better the cultural and structural relationships that shape individual intentionality and thus recognize both the individual and collective aspects of the structure-event dialectic (Gillespie 2001). The trick in this case is to tease out both the static and dynamic cultural meanings of the structural concepts represented in material goods.[2] Identifying such values in material goods necessitates viewing objects as material discourse whose meanings are determined by both syntagmatic and paradigmatic relationships (Clark 2004, 208). The discourse among practice, structure, and historical event reflected in material goods often has to do with the symbolic power discussed above, particularly in terms of the creation, maintenance, and manipulation of individual social identities and the political power of social actors. Nonetheless, the fact that the perceiver is rarely the author of a particular artifact (Gell 1998; Sahlins 1989, 7) complicates the identification of the individual intentions and motivations associated with its production. Further muddling the issue, the message encoded in an artifact may be accepted or rejected by its intended audience. Accessing the content of a message and the intentions of its creator requires attention to its situation, that is, the standing and social roles or characteristics of participants in the discourse, the form and communicative code of the message, and the actual cultural and physical setting in which the message is encoded and decoded (Basso 1989, 428). I concur with Houston (2004a, 227, 229) that such situations, concepts, and issues are far easier to identify and study in early writing systems and iconography, insofar as art and textual inscriptions can be understood as both purveyors of historical content and material artifacts in archaeological contexts. In the following paragraphs, I demonstrate how a textual approach to agency informed by practice theory and structural historicism aids interpretation of past structures and the intentions of individual agents on a general level and in the specific case of individuals involved in a singularly significant event in lowland Maya history.

STRUCTURAL-HISTORICAL CONTEXT: THE ENTRADA OF AD 378

The above discussion of the interplay among agency, intentionality, individual action, and cultural structure frames the following examination of the material goods produced by individuals involved in the entrada, the intentions and motivations behind this production,

and the structural consequences of these actions. The events of January 16, AD 378, are among the most widely debated in Classic Maya history, as the episode itself exercised a transformative effect matched by few others in the Maya world. The entrada and its aftermath are recorded in detail on Stela 31 of Tikal, dedicated by the ruler Siyaj Chan K'awiil, which dates to AD 445 (Long Count date 9.0.10.0.0; Englehardt 2005; Figures 8.1 and 8.2). The rear face of the stela (Figure 8.1) contains a text of great length: 232 glyph blocks in eight rows and twenty-nine columns. Its narrative content details a section of the dynastic history of Tikal, indicating that on the Maya date of 11 Eb' 15 Mak (Long Count date 8.17.1.4.12; January 16, AD 378; glyph blocks D19—C24), a group of foreigners led by a figure known as Siyaj K'ahk' arrived at Tikal. The text and iconographic representations of these strangers on Stela 31, as well as the cultural projects associated with these individuals (which will be discussed in greater detail shortly), suggest that they came from the central Mexican site of Teotihuacán, the preeminent power in Early Classic period Mesoamerica (Figure 8.3). On the same date, the previous ruler of Tikal, Tok Chak Ich'aak, died, and a new ruling dynasty unrelated to the former king was established, placing the father of the monument's patron Siyaj Chan K'awiil, an individual named Yax Nuun Ayiin, on the throne of Tikal (Englehardt 2005; Martin and Grube 2000, 29; Stuart 2000).

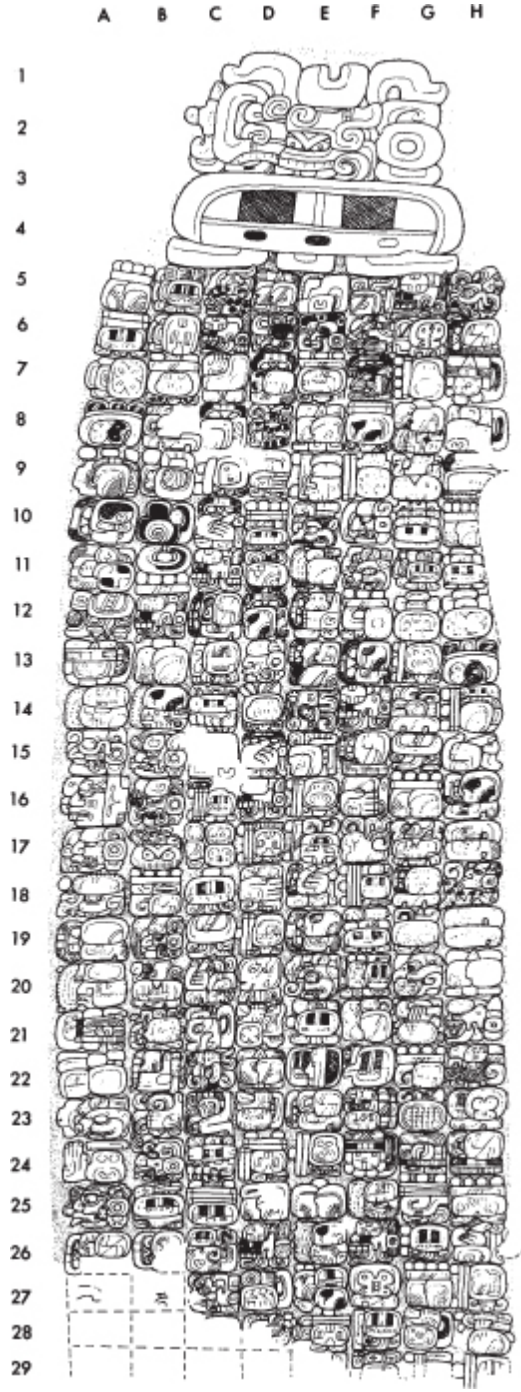


FIGURE 8.1. Tikal Stela 31, text on rear face (after Jones and Satterthwaite [1982, 192, figure 52b], reprinted with permission of the University of Pennsylvania Press).

In effect, a new dynastic order, perhaps drawn from the ruling

house of Teotihuacán, took power at Tikal, an event whose repercussions reverberated throughout the Maya lowlands in the centuries that followed. Some scholars argue that the entrada was in fact a militaristic incursion signifying the beginning of an overt central Mexican presence in the lowlands associated with Teotihuacán political domination of the Maya area beginning in the late fourth century AD (e.g., Stuart 2000; see Braswell 2003a, 23—27, for a useful overview). Although some degree of interaction between Teotihuacán and the Maya area prior to the entrada is widely accepted, the nature of this relationship is still unclear. Nevertheless, the fact that the headdress held aloft by Siyaj Chan K'awiil on the front face of Stela 31 (Figure 8.2) bears a medallion with the Teotihuacán emblem of an owl, shield, and spears suggests the central Mexican origins of the new order at Tikal.[3] Moreover, the portraits of Yax Nuun Ayiin that flank Siyaj Chan K'awiil on the side faces of the stela (Figure 8.2) portray the king adorned in Teotihuacán dress grasping a characteristic Teotihuacán rectangular shield and holding the ubiquitous central Mexican *atlatl* spearthrower. The iconographic program of Stela 31 incorporates ostensibly Teotihuacán visual elements, thus presenting the new order as individuals with strong personal connections to Teotihuacán (Martin and Grube 2000, 34; Stuart 2000). Further evidence, such as the mural from the nearby site of Uaxactún (Figure 8.4), which shows a black Maya lord figure on the right dressed in traditional lowland garb in a gesture of greeting or submission to an armed warrior in Teotihuacán-style headdress and wielding an atlatl, also supports the contention that the entrada signaled the beginning of increased Teotihuacán involvement in, if not outright control of, the Maya lowlands after the event.

In the years following the entrada, Teotihuacán-style artifacts and motifs proliferated throughout the Maya lowlands (see Braswell 2003a, 2003b).[4] At Tikal the new dynasty was radically different from the one that preceded it, and the royal imagery suddenly became Mexican. Most of Tikal's preexisting monuments were destroyed or dispersed from the city center to peripheral locations at the site (Martin and Grube 2000, 30). New Mexican-style monuments were erected, such as Stela 32 (Figure 8.5), which broke from earlier iconographic programs and incorporated distinctive Teotihuacán iconographic elements, such as tasseled headdresses, shell necklaces, earspools, and goggle eyes (cf. Borowicz 2003; Nielsen 2003, 2006). Of particular relevance are the increased use and florescence of the distinctive Teotihuacán *talud-tablero* architectural style, ubiquitous at the central Mexican site, throughout the Maya lowlands immediately following the entrada (Cash 2005; Fash 1998; Laporte 1995, 2003; Laporte and Fialko 1990). Curiously, however, the appropriation of

central Mexican visual motifs and architectural forms at Tikal and elsewhere was almost never a wholesale adoption of standardized Teotihuacán material culture. Rather, iconographic and architectural elements were selectively incorporated into wellestablished local representational traditions and design conventions.

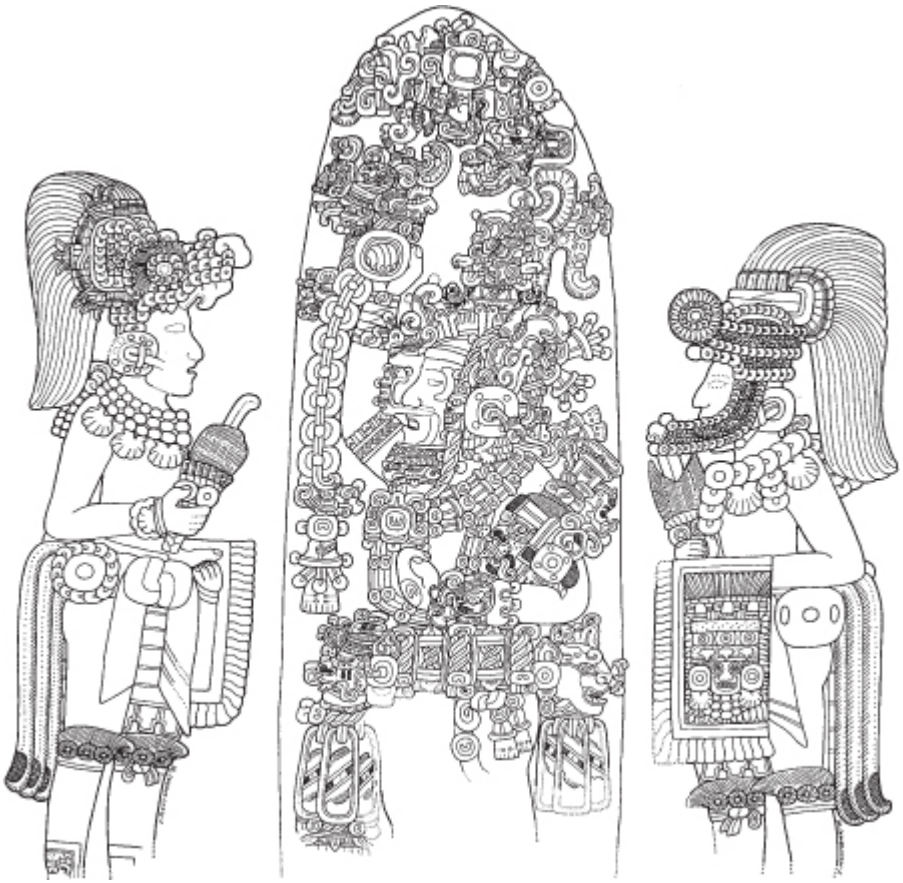


FIGURE 8.2. Tikal Stela 31, front and side faces (© Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org; reproduced with the permission of FAMSI, Inc.).

In any case, by appropriating Teotihuacán-style material culture, the new-order rulers of Tikal effectively redefined their individual and collective identities, as well as the institution of kingship itself at the site. Against this backdrop, the new king Yax Nuun Ayiin and his descendants ruled Tikal for the following three centuries. Examining the material artifacts, iconographic programs, and other cultural projects associated with these rulers, one can begin to gauge the intentions and motivations behind their manufacture, as well as the far-reaching structural consequences of that production. Ultimately, it appears that through the reproduction of the entrada cultural contact

in its own image, the new order at Tikal not only advanced its own strategic interests but also transformed the social structures that both underlay and shaped the material culture that emerged from that event on multiple levels. I will first explore the individual motivations and intentions that inspired the cultural production of the new order before turning to the apparently unintended consequences of the practice—the reconfiguration of extant social relations and political organization in the Maya lowlands that occurred after the entrada.

FIGURE 8.3. Map of Mesoamerica detailing sites discussed in text.

AGENTS, STRATEGIC MOTIVATIONS, AND CONSEQUENCES

I focus on the identities of the individuals involved in the Tikal entrada, particularly the two aforementioned new order rulers of Tikal, Yax Nuun Ayiin and Siyaj Chan K'awiil, and the material objects associated with these individuals. After being installed on the throne of Tikal, an event overseen by Tikal's "conqueror" Siyaj K'ahk', the new ruler Yax Nuun Ayiin erected two monuments, Stela 4 and Stela 18 (Figures 8.6 and 8.7), during his reign. Both were dedicated on the k'atun-ending date of AD 396 (Long Count date 8.18.0.0.0), both depict the ruler in an unusual seated pose, and neither fully portrays him as a "Maya" king. On Stela 4, he is seen wearing an elaborate feathered headdress depicting an open-mouthed jaguar head or Teotihuacán War Serpent and a characteristic Teotihuacán-style shell collar necklace, both elements of central Mexican costume (Nielsen 2003). In his left hand he holds a possible Teotihuacán "conquest torch bundle" (cf. Nielsen 2006, 24-25, figure 3).[5] On Stela 18, Yax

Nuun Ayiin carries the Teotihuacán coat-of-arms shield in his lap, wears the characteristic tasseled headdress and goggles, and possibly holds an atlatl in his left hand. Like his portraits on the side faces of Stela 31, which depict him as a fully equipped central Mexican warrior with plated helmet, atlatl spearthrower, and square shield featuring goggle-eyed Mexican deity motifs, Yax Nuun Ayiin's two monuments overtly present the ruler as having strong, explicit Teotihuacán affiliations (Martin and Grube 2000, 32, 35).

FIGURE 8.4. Scene from a mural at Uaxactún showing a Maya lord in a gesture of greeting or submission to an armed warrior in Teotihuacán-style attire (from *The Ancient Maya*, 5th edition, by Robert J. Sharer; © 1994 by the Board of Trustees of the Leland Stanford Jr. University, all rights reserved, used with the permission of Stanford University Press, www.sup.org).

Yax Nuun Ayiin's self-identification with Teotihuacán is also evident on Uaxactún Stela 5 (Figure 8.8), which shows the ruler in full central Mexican regalia, again wearing an elaborate, oversized

feathered headdress and shell necklace and holding both an atlatl and an obsidian-spiked club. Mortuary goods encountered in the rich cache of Tikal Burial 10, the internment of Yax Nuun Ayiin, are executed in pure Teotihuacán style, incorporating central Mexican iconography and produced using Mexican techniques of incising and painted stucco (Cash 2005, 90; Wright 2005; see, e.g., Martin and Grube 2000, 33). Moreover, the supervisor of his accession, Siyaj K'ahk', is named on Stela 31 (glyph block D21) as *ochk'in k'awiil*, "western k'awiil," suggesting that the new order had its roots in the west, outside the Maya lowlands. Yax Nuun Ayiin's father, the enigmatic individual known as Spearthrower Owl, bears an overtly Mexican name whose glyphic representation on Stela 31 (glyph blocks G21 and H28) resembles the Teotihuacán *lechuza y armas* motif and possesses direct ties to Teotihuacán (Martin and Grube 2000, 30). Spearthrower Owl was almost certainly from Teotihuacán, a conclusion based not only on his exotic, non-Mayan name, whose representation includes the atlatl, a ubiquitous central Mexican motif, but also on the recent discovery of a possible "Spearthrower Owl hill" toponym glyph at the compound of Atetelco in Teotihuacán (Nielsen and Helmke 2008). Finally, the Tikal *marcador*, or ballcourt marker, excavated in the Group 6C-XVI residential compound, and modeled in pure *talud-tablero* architectural style, is almost identical to a similar object unearthed at Teotihuacán (Laporte 1995, 2003; Martin and Grube 2000, 31). This artifact is tied to Yax Nuun Ayiin insofar as it was dedicated to Spearthrower Owl during his son's reign by another vassal of Siyaj K'ahk', details the entrada event, and features numerous Teotihuacán iconographic elements. This evidence suggests that the ruler actively sought to define his identity as an individual with direct ties to Teotihuacán.

FIGURE 8.5. Tikal Stela 32, showing a highland warrior wearing a so-called tassel headdress in direct Teotihuacán art style (drawing by Simon Martin; Martin and Grube 2000, 31; reproduced with the permission of Simon Martin).

FIGURE 8.6. Tikal Stela 4, depicting the accession of Yax Nuun Ayiin to the throne of Tikal, wearing a Teotihuacán- style shell necklace and elaborate headdress, and holding a possible "conquest torch bundle" in his left hand (© Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org; reproduced with the permission of FAMSI, Inc.).

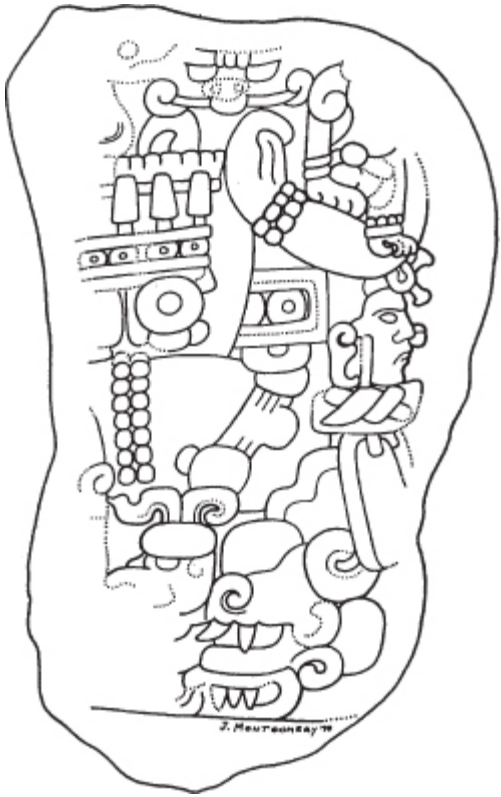


FIGURE 8.7. Tikal Stela 18, depicting Yax Nuun Ayiin, now wearing a mixture of Teotihuacán and traditional Maya objects; note the Teotihuacán coat-of-arms emblem on the left, with characteristic goggle eyes and feathered headdress, and the Maya-style ancestor mask on the right (© Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org; reproduced with the permission of FAMSI, Inc.).

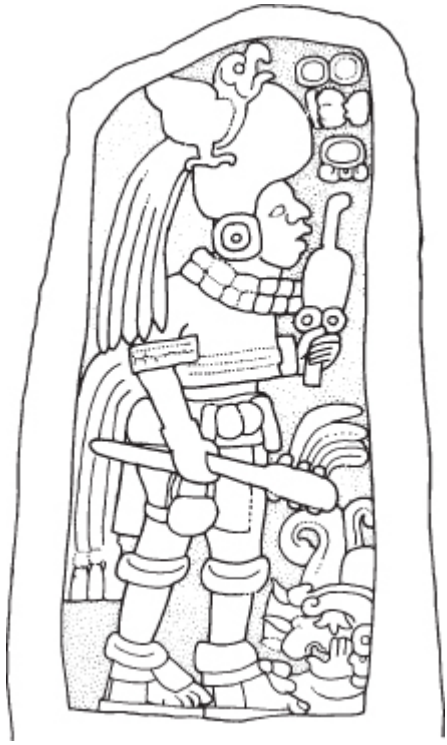


FIGURE 8.8. Uaxactún Stela 5, showing Yak Nuun Ayiin in Teotihuacán-style headdress and holding an atlatl and obsidian-spiked club at his accession and celebrating the same arrival event as Tikal Stela 31 (drawing by Linda Schele, © David Schele, courtesy Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org; reproduced with the permission of FAMSI, Inc.).

Despite the fact that Yax Nuun Ayiin seems to have consciously portrayed himself in the distinctive trappings of Teotihuacán imperialism, other evidence associated with this king emphasizes a dualistic aspect to his ancestral heritage. For example, several features of his monuments, such as the floating K'awiil figure above Yax Nuun Ayiin's head or the image of the Maya Jaguar God of the Underworld that he holds in his right hand on Stela 4, are thoroughly Maya in design and execution and typical of Early Classic period Maya royal portraits (Cash 2005, 91; Nielsen 2006, 25). On Stela 18, he is also wearing traditional Maya objects, such as the plaques and ancestor mask attached to his Mayastyle belt. What makes Yax Nuun Ayiin's monuments particularly interesting is the direct juxtaposition of central Mexican symbols in locations traditionally reserved for Maya patron gods, ancestors, or emblems of rulership. Rather than a complete replacement of Maya imagery, however, the competing sets of symbols coexist within a traditional royal portrait. On both stelae, the unique seated viewpoint, showing the ruler in composite view

with a frontal torso and profile lower body, allowed Yax Nuun Ayiin to simultaneously present his Teotihuacán connections and maintain the integrity of lowland Maya representational conventions.

The visual programs of Stelae 4 and 18 serve two purposes. Although the incorporation of Mexican elements symbolically disconnects Yax Nuun Ayiin from earlier rulers and distinguishes him as the figurehead of the new dynastic order, the monuments retain traditional symbolic and compositional elements that maintain a metaphorical connection with these same rulers (Borowicz 2003, 224-26; Cash 2005, 91). Likewise, the Hombre de Tikal sculpture seemingly associates Yax Nuun Ayiin with the previous ruler, Tok Chak Ich'aak, by employing glyphs that name and provide the *tajal chaak* ("Torch Rain God") epithet of the former king. The object itself may have even been a personal portrait of the previous ruler reused by the new king (Martin and Grube 2000, 33). On Stela 31, in addition to the side-face portraits of Yax Nuun Ayiin as a Teotihuacán warrior, the front face features a representation of the ruler floating above the head of his son, this time depicted as an ancestral sun god in purely Maya form (Martin and Grube 2000, 34). In sum, the cultural projects associated with Yax Nuun Ayiin appropriate central Mexican iconographic elements while at the same time incorporating these references into well-established lowland traditions, thus fusing Maya and Teotihuacán form and decoration.

Similarly, the material production of Yax Nuun Ayiin's son Siyaj Chan K'awiil also strongly featured Teotihuacán iconography and central Mexican imagery while at the same time absorbing a greater degree of overtly Maya symbolism. The texts and iconographic depictions of symbolic regalia on Tikal Stelae 1 and 28 are executed in a more overtly Maya style and serve to explicitly associate Siyaj Chan K'awiil with strictly Maya elements. In his portrait on the front face of Stela 31, Siyaj Chan K'awiil is depicted shrouded in Maya royal ornamentation. The iconographic composition of the monument is consciously archaic in style and largely copied from Tikal Stela 29 (Martin and Grube 2000, 34). The complex headdress he holds aloft, in addition to bearing the Teotihuacán emblem (or possibly the name of Spearthrower Owl), carries the crest of Yax Ehb' Xook, the mythical founder of the Tikal dynasty, thus making explicit claims to dynastic continuity. Texts on two vases also list Siyaj Chan K'awiil as the sixteenth in the line of Yax Ehb' Xook, despite the fact that the new order could make no "legitimate" claim to dynastic continuity based on genealogical relation or direct descent. Continuing the assertion of continuity, the text on the rear face of Stela 31 mentions Yax Nuun Ayiin "ascending the lineage house" (glyph blocks E5-F6, *"t'ab'aay wi' te' naah"),* a distinctly Mayan phrase further linking Siyaj Chan K'awiil

and his father to the old ruling line of Tikal. At glyph blocks C5 and D8, the text makes special mention of two former rulers of Tikal, Waterlily Jaguar and Lady Une B'alam, again apparently to assert a connection between the new order and the previous dynasty. Through the appropriation of Teotihuacán symbolic and iconographic motifs in a specifically lowland Maya representational and textual context, Stela 31 redefines the identity of the lords of Tikal as neither debased nor diluted by foreign blood or a central Mexican military ideology and its associated iconography, but reinvigorated (Borowicz 2003, 226; Martin and Grube 2000, 34).

It is curious that the new order at Tikal consciously chose to emphasize connections with Teotihuacán while actively maintaining a connection with both the old regime and traditional lowland Maya representational canons. One may inquire about the intentions or strategic motivations of these rulers in assimilating such seemingly incongruous elements to serve apparently disparate ends. In addressing this query, several points are of crucial importance. It is significant that Yax Nuun Ayiin has a Mayan name. The textual titles of his wife (and therefore the mother of Siyaj Chan K'awiil), Chi Jo Nik (Stela 31 glyph block A24), indicate that she was a local, presumably Maya woman, perhaps suggesting a strategic marriage to establish a culturally fused bloodline (Martin and Grube 2000, 32). Curiously, a damaged text possibly describes the marriage of Yax Nuun Ayiin's father, Spearthrower Owl, to a noblewoman of Tikal (Martin 2002; Martin and Grube 2000, 31). On Stela 31, Siyaj Chan K'awiil's reference to Lady Une B'alam and his emphasis on the fact that his mother was a Maya woman (echoed on Stelae 1 and 28) may serve to establish precedent for the matrilineal transfer of dynastic continuity (Martin and Grube 2000, 34).[6] Perhaps most importantly, a recent strontium isotope analysis indicates that the individual interred in Burial 10, the grave of Yax Nuun Ayiin, was not foreign-born, despite the fact that his father was ostensibly from Teotihuacán (Wright 2005).

Given these facts, I suggest that the new order at Tikal comprised members of a competing lineage, house, or faction that rivaled the previous dynasty. I speculate that the mother of Yax Nuun Ayiin married the foreign Spearthrower Owl, who was a Teotihuacán nobleman or diplomat present in the lowlands prior to the entrada. There is evidence for a Teotihuacán presence in the Maya area before the event (e.g., talud-tablero architecture at Tikal and Kaminaljuyú, green obsidian from the central Mexican Pachuca source, and Teotihuacánstyle ceramics throughout the lowlands). We also know that royal Maya women sometimes married in this way (Braswell 2003a, 26; 2003b). I contend that Spearthrower Owl intervened in

Tikal's dynastic affairs at the invitation of a royal faction that included his wife and Siyaj K'ahk' after previous ruler Tok Chak Ich'aak died without a suitable heir. In this power vacuum, a competing group sought to place one of its own on the throne of Tikal. Yax Nuun Ayiin was selected because of his maternal connections with the old regime.[7] He later ascribed the highest Maya title of *k'aloomte'*(see Braswell 2003a, 25; Stuart 2000) to his father and installed him as overlord of several sites in the Petén region of northern Guatemala to propagandize his less illustrious pedigree and justify dynastic change, effectively legitimizing the weakest link in his heritage and mythically connecting himself to Teotihuacán. His actual political links to Teotihuacán may have been much weaker—or, indeed, fictitious. Cultural projects associated with Yax Nuun Ayiin therefore fuse multiple aspects of his social identity, displaying a conflation of Teotihuacán and Maya visual elements.

In this light, one may conceive of the cultural projects associated with the new order at Tikal as dexterous political maneuvering (cf. Wang, this volume). By creating an amalgamation of Maya and Teotihuacán symbolism, Yax Nuun Ayiin and his descendants sought to (somewhat paradoxically) reinvent the new order as a standard-bearer of continuity and tradition (Houston and Stuart 1996; Martin and Grube 2000, 34).[8] It would thus appear that a primary motivation behind the material cultural production of both Yax Nuun Ayiin and Siyaj Chan K'awiil was the exertion of symbolic power to validate their authority and sovereign right, solidify their own political base, and justify a somewhat irregular change in the line of succession among Tikal royalty through association with the power and prestige of Teotihuacán. In this sense they were successful. The descendants of Yax Nuun Ayiin ruled Tikal for the following two centuries, continuing a material program of mixed Teotihuacán and Maya symbolism (e.g., Stela 40 of K'an Chitam, a Teotihuacán-style painted plate commissioned by Wak Chan K'awiil; see Martin and Grube 2000, 37, 39) and mirroring claims of dynastic justification through matrilineal descent.

The motivations behind the material cultural production of the new order at Tikal form one half of the concept of agency that I seek to address in this chapter. However, there is much more at play here than simply the strategic intentions of self-interested social actors. The complexity of the evidence demands a more detailed analysis, which in turn yields a more nuanced interpretation, thus adding to our understanding of the complex structures and events reflected in the artifacts. The intentions and goals of the social actors illustrate deeper sociocultural structures that contextualized and guided individual practice. Moreover, the entrada and the material culture that emerged

from that event fundamentally changed the practical power dynamics of Maya social organization, both at Tikal and throughout the lowlands. In essence, the episode and the subsequent actions of those involved in the event effectively reproduced and transformed the cultural structures that underlay consequent material expressions of the entrada and its cultural meaning in the Maya area. It is to this level of analysis that I now turn.

SYMBOLIC MANIPULATION, CONFLATED IDENTITY, AND STRUCTURAL TRANSFORMATION

Part of the intention behind the material cultural practices of the new order at Tikal was the desire to manipulate symbolic complexes in service of their own strategic interests (cf. Joyce 2000). An unintended consequence of these actions was the usurpation, corruption, and transformation of the extant sociostructural reality. Through the amalgamation of alien and indigenous symbolism, the new order of Tikal reproduced the historical event of the entrada in its own image, at once facilitating and legitimizing the structural transformations that accompanied the event. Although somewhat inverted, by assimilating central Mexican imagery within lowland aesthetic canons and actively seeking to establish connections with the previous dynasty, the new regime at Tikal nevertheless kept faith with the old system. I suggest that the plane of action in both the iconographic representations and texts associated with the monuments produced by Yax Nuun Ayiin and Siyaj Chan K'awiil intentionally and consciously alternated between vertical (cosmological) and horizontal (terrestrial) planes to accomplish this end.

For example, the iconographic and textual evidence associated with the entrada and its protagonists appears to present the new order as voyaging conquerors. The texts of Tikal Stela 31 (glyph block D21, Siyaj K'ahk' as *ochk'in k'awiil*) and the Tikal *marcador* remind us that the interlopers of the new order have roots in the west, perhaps in some mythical place of origin (see Helms 1993; Sachse 2008; Stuart 2000). Monuments at El Perú-Waka' (to the northwest of Tikal) and Uaxactún also detail the fact that the passage of Siyaj K'ahk' into the Maya lowlands occurred from the west. The florescence of the taludtablero architectural style following the entrada may have served as a visual reminder at Tikal and elsewhere of the Teotihuacán origins of the new order (Cash 2005, 52–53, 165, 191; Sharer 2003, 156). The mythical archetype of the voyaging conqueror with origins in the west

was common in Preclassic and Early Classic period Mesoamerican cultures and found parallels in later contexts.[9] In presenting themselves as voyaging conquerors, it is likely that the new order of Tikal sought to gain acceptance for their irregular accession by tapping into deeply held social structure and shared cultural beliefs.

Likewise, it is probable that the death of Tok Chak Ich'aak was presented in a manner that mythicized his passing to gain acceptance for the new regime. Importantly, the text on Stela 31 does not specify the circumstances surrounding his death. Nevertheless, it appears that the audience is intended to make a connection between the arrival of the new order and the death of the previous king, given that the text specifies that these events occurred on the same day. By presenting themselves as mythical, voyaging conquerors intimately connected to the demise of the former ruler, the new order depicted the succession of Yax Nuun Ayiin as a celebration of victory. In this sense, usurpation becomes the very principle of political legitimacy, effectively masking what for all intents and purposes was an abnormal succession (Sahlins 1989, *24)*. Metaphorically "slaying" the former king not only re-creates a natural, established cosmological order but allows the interloper to appropriate that death as a claim of quasinormal succession, thus emphasizing continuity over change (Houston and Stuart 1996).[10] Moreover, since Maya and other Mesoamerican rulers were often presented as "divine" kings, the actions of such "mythical conquerors" could thus be presented as an enactment of divinity, justifying their conquest in cosmological terms and presenting political subordination in terms of mythological subordination (Houston and Stuart 1996, 295–300; see especially figures 7–10). In reusing the Hombre de Tikal figure and making overt reference to Tok Chak Ich'aak's *tajal chaak* epithet, Yax Nuun Ayiin accorded his defeated rival divine status even after death. This makes perfect sense —by identifying the former king as a god, Yax Nuun Ayiin indirectly claims divine status for himself.

Manipulating the symbolic representations of the entrada allowed this celebrated episode to be reexperienced by the living rulers, thus transforming them into the mythical heroes represented in depictions of the event. By assuming the properties of the event, its representation becomes social fact through its display in social space, and its power and veracity are subsequently internalized within the social group as objective truth (Bourdieu 1989). In this sense, the representation becomes a historical metaphor of a mythical reality, effectively justifying practical arrangements of the present through its ideological projection as a past (Sahlins 1989, 14). The new rulers of Tikal thus redefined or reconfigured their public image and identity as both the progenitors and inheritors of the symbolic and political

power associated with the entrada and its aftermath. This effect was only possible because in Classic lowland Maya representational traditions there existed a conflation between the image of the depicted subject and the physical subject itself, merging the biological and cultural aspects of the subject within the representation. For example, since Maya rulers often presented themselves as divine kings, the notational godheads associated with their titles symbolized the divine but also came to represent the specific individuals associated with that title (Houston and Stuart 1996, 1998). Through conflated identity in iconographic and textual representations, conflicting, dualistic identities merged in the assimilation of distinct Teotihuacán and lowland Maya representational canons within a singular context. Such iconographic amalgamation illustrates multiple aspects of the represented subjects, drawing power from both sources and effectively fusing a dual identity into a single entity represented in text or image.

In other words, effigies both represented and quite literally *were* the things they portrayed (Houston 2001, 207; Houston and Stuart 1998). Yax Nuun Ayiin and Siyaj Chan K'awiil were thus able to take advantage of an existing structural tradition to transform their socially constructed identities, incorporating the biological and cultural (i.e., divine and secular) aspects of their personhood, transforming themselves into the mythical, quasi-divine subjects of their monuments. Associating themselves with supernatural divinity appears to be another level of motivation behind the cultural projects of the new order at Tikal. The iconography and inscriptions of these monuments, however, not only were records of a historical event but also became "fetishized entities," taking on a life and intent of their own (Houston 2004a, 226). The power of their message exists only as a consequence of interaction between the social actors that produced and consumed such material culture. In this sense, there appears to have been a fusion of the situational and systemic identities of the monuments themselves and, by extension, the individuals associated with them. Differences in content, scale, and perception of representations influenced people's self-understandings of both their own identities and the subordination-domination dialectic involved in the entrada event and its aftermath (Clark 2004, 214). Symbolic manipulation and reorganization created distinct conceptual values, leading to the transformation of both message and systemic context. The artifacts themselves both instantiated and were made possible by the reconfigured identities that sprang from the structure-event conjuncture: the objects preceded their meanings as material symbols (Clark 2004, 206; Sahlins 1989).

Finally, by presenting themselves in this way, the cultural practices of the new order at Tikal played a crucial role in reshaping the power

dynamics of the Maya lowlands, effectively completing the structural transformation begun by the entrada itself. The actual extent of the transformations wrought by the episode at Tikal remains unclear, but in the years following the event, Teotihuacán-style material artifacts, iconographic motifs, and central Mexican symbolism flourished throughout the Maya lowlands (Cash 2005; Fash 1998; Houston and Stuart 1996; Martin and Grube 2000, 30; Nielsen 2003, 2006; Sharer 2003). Often, Maya rulers appropriated prestigious foreign symbols into local representational conventions to reinforce their own local political authority in much the same manner as Yax Nuun Ayiin and Siyaj Chan K'awiil at Tikal, creating objects that display a similar amalgamation of Teotihuacán and Maya visual elements (cf. Houston and Stuart 1996, 302, figure 10).

For example, at Copán, the founder of the Classic period dynasty K'inich Yax K'uk' Mo' "arrived" at the site in AD 426 (shortly after the entrada at Tikal), overthrew the established ruler, and was installed on the throne. Like Yax Nuun Ayiin, he consolidated his power through marriage to a royal woman from the old ruling family and privately and publicly manipulated the symbolism of political and supernatural power derived from both Teotihuacán and the Maya lowlands, basing much of his authority on his associations with Teotihuacán military traditions (Sharer 2003, 163). His portrait on the west side of Copán Altar Q (Figure 8.9) shows K'inich Yax K'uk' Mo' as a Maya ruler seated on an *ajaw* glyph but also depicts him in characteristic Teotihuacán goggles and bearing a central Mexican War Serpent shield on his right arm. Other depictions of the ruler invariably present him in an eclectic mix of Maya and central Mexican garb (Martin and Grube 2000, 192–93; Sharer 2003, 145). Architectural programs associated with or dedicated to K'inich Yax K'uk' Mo' (e.g., the Hunal, Yax, and Motmot structures) incorporate talud-tablero architecture and distinctly Teotihuacán symbolic motifs, while also displaying affinities with contemporary architecture at Tikal (e.g., apron moldings and inset corners; Cash 2005, 190–98; Fash 1998; Martin and Grube 2000, 193). The Hunal and Margarita tombs associated with the ruler contain rich caches of Teotihuacán-style artifacts and central Mexican warrior paraphernalia such as mosaic jade-and-hematite earflares, cut-shell goggles, and atlatl darts (Sharer 2003, 150–56, 162, figures 5.3–5.5). Like Siyaj Chan K'awiil at Tikal, the son of K'inich Yax K'uk' Mo', K'inich Popol Hol, continued to synthesize central Mexican and orthodox lowland Maya traditions by accentuating Maya connections in his architecture, monuments, and even specific textual references (Fash 1998, 228–29; Sharer 2003, 163).

FIGURE 8.9. Portrait of Copán dynastic founder K'inich Yax K'uk' Mo' on west side of Copán Altar Q; note Teotihuacán-style goggle eyes, headdress, and the Teotihuacán War Serpent shield on the right arm (drawing by Linda Schele, © David Schele, courtesy of Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org; reproduced with the permission of FAMSI, Inc.).

The striking similarity of events at Copán to those at Tikal fifty years earlier is as readily apparent as it is intriguing (Sharer 2003, 163). The parallels between the arrival stories and the establishment of a new order that consolidates power by emphasizing central Mexican affiliations in both instances suggest that K'inich Yax K'uk' Mo' may have been part of the new order at Tikal. Curiously, strontium isotope analysis reveals that the individual buried in the Hunal Tomb, the grave of Copán's dynastic founder, was a native of the Petén (Sharer 2003, 152). Although this fact is intriguing, I do not suggest that any of the historical figures involved in the entrada were directly associated with or ultimately "caused" later happenings at Copán and elsewhere in the Maya lowlands. What is apparent is that throughout the Maya world after AD 378, new and more complex political orders took root in the lowlands, concurrent with the proliferation of a variety of cultural projects that stressed both continuity and change in the lowlands through the incorporation of central Mexican architectural styles, production techniques, military paraphernalia, iconographic motifs, and symbolism within lowland Maya representational and aesthetic conventions. This began at Tikal, where the interlopers of the new order manipulated existing textual and iconographic traditions to justify and make practical sense of their rule within a given cultural way of understanding the world. As Yax

Nuun Ayiin and Siyaj Chan K'awiil reproduced the same structures but in new historical contexts, the structural milieu was fundamentally altered. In this light, and although employed by distinct individuals to serve specific intentions in distinct historically particular circumstances, the proliferation of the Teotihuacán style in the years following the entrada was an unconscious side effect of events at Tikal rather than an active structural manipulation as such.

The "practical politics" of the new order at Tikal seems to have meaningfully internalized a unique practical consciousness that subsequently altered the structural context of political power and legitimacy in the Maya lowlands for centuries to come (Dornan 2002, 307; Giddens 1979, 24; Silliman 2001, 194–95). Even into the Late Classic period, long after the decline of Teotihuacán, Maya rulers reinforced their power by reviving highly visible symbolic links to central Mexico. After the hiatus at Tikal, the ruler Jasaw Chan K'awiil revitalized Tikal after its defeat by Calakmul through a renewal of the new-order Teotihuacán symbolism, presenting himself as a Teotihuacán warrior wearing a mosaic helmet and carrying an atlatl and darts on a wooden lintel from Temple 1. His grandson took the name Yax Nuun Ayiin II, evoking the symbolic and transformative power of his forebear a full four centuries after the death of his namesake (Martin and Grube 2000, 45–51). At Copán, later rulers revived Teotihuacán symbolism to reinforce their political power and authority, evident in Late Classic period structures 10L-22, with its talud-tablero substructure platform, and 10L-16, the facade of which comprises central Mexican Tlaloc deity masks (Fash 1998; Sharer 2003, 164).

Cultural structures frame individual action through such "meaningful internalization" of normative-structural boundaries evidenced in the Late Classic period Teotihuacán revival (Dornan 2002, 321). In other words, the pragmatic actions of a few individual agents at Tikal in and after the historical event of the entrada exercised profound and transformative systemic effects that were felt throughout the Classic period Maya world. We may never know if Yax Nuun Ayiin and Siyaj Chan K'awiil "invented" the new system, but it is clear that they were there at its beginning. Moreover, the intentions, motivations, and consequences of their actions both shaped and were shaped by the structural context in which they took place, at once continuing, renegotiating, redefining, and transforming the systemic structure as a whole. Events are ordered by culture, but in the dynamics of that process, the culture itself is reordered. In this sense, the reproduction of the structure becomes its transformation (Dornan 2002, 323; Pauketat 2001, 86–88; Sahlins 1989, 8).

CONCLUSIONS

Agency is a powerful theoretical tool that can meaningfully contribute to our understanding of the intentions, consequences, and motivations involved in the historically particular subjectivities of past social actors. In this chapter, I have attempted to demonstrate how a textual perspective may help to clarify some of the theoretical and practical dilemmas associated with the archaeological application of the agency concept, particularly with regard to traditional confusion over the intersection of individual practice, intentionality, and the structure-event dialectic. In the case of the entrada of AD 378 and its aftermath, the motivations of social actors involved in the event seem clear enough. Yax Nuun Ayiin and Siyaj Chan K'awiil sought to justify and legitimize the power of the new order at Tikal through symbolic manipulation in their iconographic and textual programs. In doing so, however, these individuals radically reconfigured, albeit unconsciously, the very structures that contextualized and gave cultural meaning to their practical actions. This structural reorganization altered the practical dynamics of political power throughout the Maya lowlands, and the effects of this transformation were felt far beyond Tikal.

What an agency perspective brings to the understanding of this particular event in Classic Maya history is a new appreciation of the multiple levels on which individual intentions converged and operated in the dynamics of behavioral practice, principally in terms of the production, reproduction, and manipulation of symbolic complexes, within a given archaeological situation (Robb 2001). In this case, agency allows us to more adequately situate the entrada episode in larger systemic contexts shaped by the structure-event dialectic and to gain a richer, deeper comprehension of a singular event that lay at the heart of the Early–Late Classic period transition in the Maya lowlands, as well as the individual motivations and subjectivities of the social actors intimately involved in the historical incident. The textual approach, in turn, makes agents more visible and allows for a fuller appreciation of historically particular synchronic situations and diachronic continuity and change. Signs, wrote Sahlins (1989, 68), only acquire intentional value through their implementation by a historic subject. Finally, it is perhaps curious that the movement between practice and structure so central to the agency approach is often at the heart of theories and models concerned with the development of writing itself. In those contexts, linguistic reorganization transforms both the written message and its systemic context through practical action (but cf. Smith, this volume, as well as Reichel, this volume), just as I have suggested occurred with the

entrada and its aftermath in the late fourth-century Maya lowlands. That connection, however, must be the subject of another discussion.

NOTES

1. Care, however, must be taken to avoid injecting modern or Westernized notions of individuals, individuality, or human action into our analyses (Dornan 2002, 324; Gillespie 2001; Knapp and van Dommelen 2008; cf. Thomas 2000, 2004).

2. For more on archaeology as the study of representations, see Barrett (2000, 62).

3. The headdress may alternately contain the name of Spearthrower Owl, an individual with documented connections to Teotihuacán and, as father of Yax Nuun Ayiin, intimately involved in the entrada (see Nielsen 2006; Stuart 2000).

4. Although a certain amount of Teotihuacán-style artifacts were present in the Maya area prior to the entrada, particularly on the Pacific coast and at the site of Kaminaljuyú, after the event central Mexican styles and motifs became much more widespread in the lowlands and in the Maya core area of the Petén.

5. Parallels of these iconographic elements occur extensively at Teotihuacán (see Nielsen 2003, 2006).

6. Significantly, the theme of matrilineal descent was continued by Siyaj Chan K'awiil's son K'an Chitam on Stela 2, which also depicts the ruler impersonating Maya fire deities (Houston and Stuart 1996; Martin and Grube 2000, 37). It is further noteworthy that Stela 40, associated with K'an Chitam, incorporates Teotihuacán visual elements, echoing the cultural projects of his father and grandfather.

7. A useful line of inquiry suggested by the proposition of male usurpers marrying royal Maya women to justify their claims of authority is that of the gender of agency (cf. Ardren 2002; Joyce 2004; Joyce and Lopiparo 2005; Meskell and Joyce 2003). Were these women simply political pawns or were they agents in their own right? A fuller treatment of these issues is certainly warranted, but it is beyond the scope of the present analysis, and space constraints limit the mention I may give it here.

8. Of course, as Dimitri Nakassis has pointed out to me (personal communication, 2010), we need not see this new identity as solely politically motivated. In fact, as I argue herein, it appears that in many ways it was a "real" mixed identity that happened to be manipulated or perhaps seemed ripe for manipulation at some point

after the entrada. In either case, however, the intentionality and specific motivations behind the political maneuvering associated with the new order seem clear enough.

9. For instance, consider the Postclassic period cult of Kulkulkán in the northern Maya lowlands, associated with the Toltec figure Queztalcóatl, a deposed king who was banished to the east, vowing one day to return. This legend caused much confusion among the Aztecs at the time of European contact, perhaps contributing to the success of Cortés's conquest.

10. Such practices were common in Mesoamerica since the Early Preclassic period—in the ritual defacement of Olmec colossal heads, for example, or the ritual destruction of sites and sculptures among the Classic period Maya (see Houston and Stuart 1998).

NINE

Inscriptions from Zhongshan
Chinese Texts and the Archaeology of Agency

WANG HAICHENG

Twenty-five years ago the eminent Egyptologist Barry Kemp made a somewhat gloomy assessment of archaeology, or at least of some of its ambitions: "The archaeology which . . . seeks to do more than to set out tableaux and to document the earthier sides of human life . . . is forced to rely upon an intellectual transformation of data which it is poorly equipped to carry out. To this extent archaeology is ... a flawed discipline" (1984, 27).

Kemp made this assessment in a 1984 essay on the relationship between archaeology and texts. Since that time, a number of new theories and methodologies have been devised in the hope of effecting his "intellectual transformation of data." The one I should like to examine here, with the help of a Chinese case study, is the archaeology of agency.[1]

Like many earlier archaeological theories, the archaeology of agency was invented and is used largely by prehistorians. Nevertheless, for historical archaeologists the object under study is the same, past societies, and when we seek to interpret change in the archaeological record in terms of past behaviors, we must always strive for a balance between individual and society (Houston et al. 2003, 214). "A society is a system composed of all of its people . . . as people they are individuals and within the system they are agents, each and every one, living within a matrix of opportunities for interaction" (Kemp 2006, 4).[2]

Historical archaeologists in possession of texts that speak of named individuals are often tempted to correlate events detected in the archaeological record with individual human agents (Houston and Inomata 2009; Houston et al. 2003; Martin and Grube 2008). A

strange satisfaction is thus obtained by inserting a small human narrative into the material record's great anonymous stretches. Prehistorians are not resigned to live without this satisfaction. They tell us in vivid detail how an injured man died 5,000 years ago in the ice of the Austrian Alps, or how a certain woman deliberately burned down a house at the Neolithic Opovo site in Yugoslavia (Trigger 2006, 471), even though they do not know the names of their actors (they have given the iceman a name: he is Ötzi). Telling such stories depends on attributing desires and intentions to the actors. In theory, this is done by inferring mental states from the material record. In practice, how far can it go? In the present chapter, I will use a late Bronze Age Chinese example to give a tentative answer and to suggest that archaeologists who work with material remains *and* texts have something of value to offer their colleagues in prehistory. In the words of another distinguished Egyptologist, John Baines, "archaeology and writing complement each other's silences" (1988, 209).

THE STATE OF ZHONGSHAN IN TEXTS AND IN ARCHAEOLOGY

The two and a half centuries preceding the unification of China in 221 BCE were a time of endemic warfare traditionally called the Warring States period. Texts of many types were written during this period by authors of all stripes: chronicles, government documents, political pamphlets, military treatises, school texts, and more (Lewis 1999, 588—93). Part of this output has been transmitted to the present day only indirectly, passing through the hands of editors and copyists. We call these documents "transmitted texts." But some documents have survived physically, in the form of books written in ink on bamboo, wood strips, or silk or in the form of display inscriptions cast or chiseled on bronze ritual vessels and musical bells. Most of the latter corpus has been unearthed since the mid-twentieth century. Together the excavated and transmitted texts supply historians with the raw material for reconstructing the political and intellectual history of the Warring States period. From them we know that the Warring States world had seven major territorial states and many small buffer states sandwiched among them. One of the smaller states was called Zhongshan (Figure 9.1).

In the transmitted texts Zhongshan receives scant attention. The few references to it were collected and arranged chronologically by a late nineteenthcentury scholar who also plotted its ever-changing borders on a map (Lü Susheng 1993). Most of the references are terse mentions of wars and alliances between Zhongshan and other polities.

In the texts the Zhongshan people are described as having originally been nomads on the northern borders of the sedentary agrarian states in the middle Yellow River valley. One text that says that a Zhongshan state was established by one Duke Wu in 414 BCE suggests that the nomads seized land and settled down. A few years later, another text says, the state was annihilated by a powerful neighbor, the state of Wei. However, some thirty years after this it reappears engaged in a war with the state of Zhao, suggesting that it had been refounded or restored. This seems to be confirmed by another text, which reports that Duke Wu's successor, Duke Huan, relocated the Zhongshan capital to a place called Lingshou. Lingshou remained the seat of the Zhongshan rulers until the final destruction of the state by the state of Zhao in 296 BCE (Hebei sheng 2005, 4-5; Li Xueqin 1985, 101; Wu Xiaolong 2004, 2).

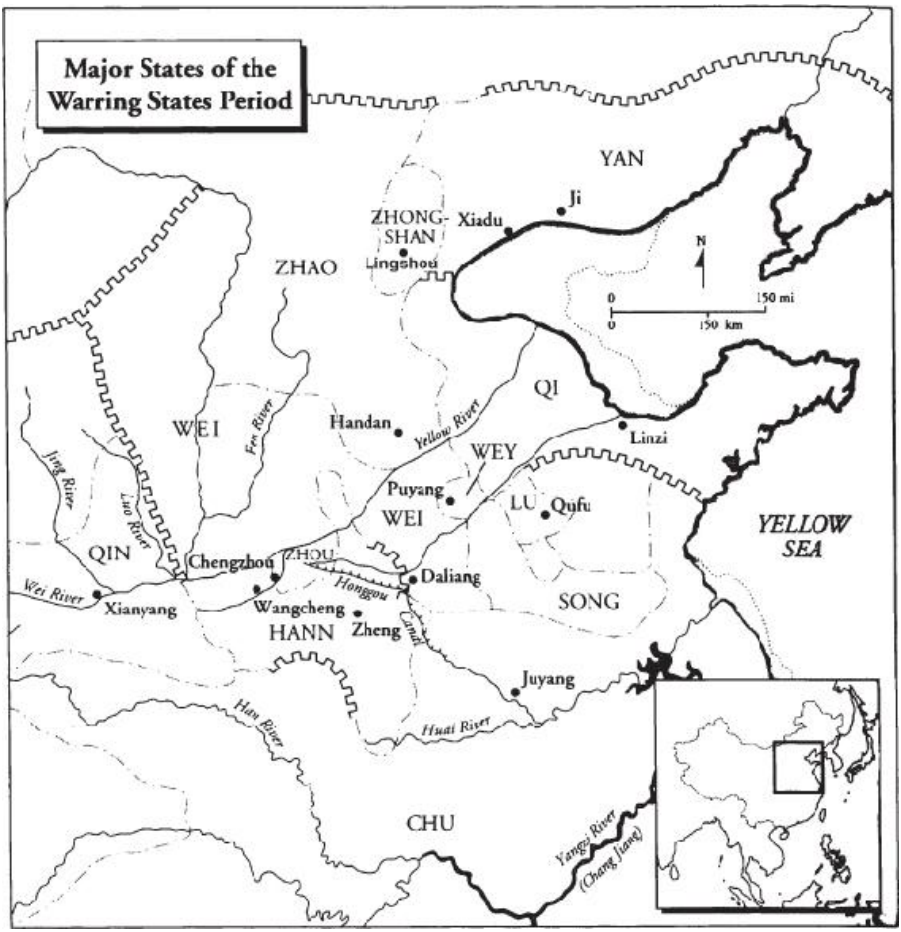


FIGURE 9.1. Major states of the Warring States period (redrawn from Lewis 1999, 594, map 9.1).

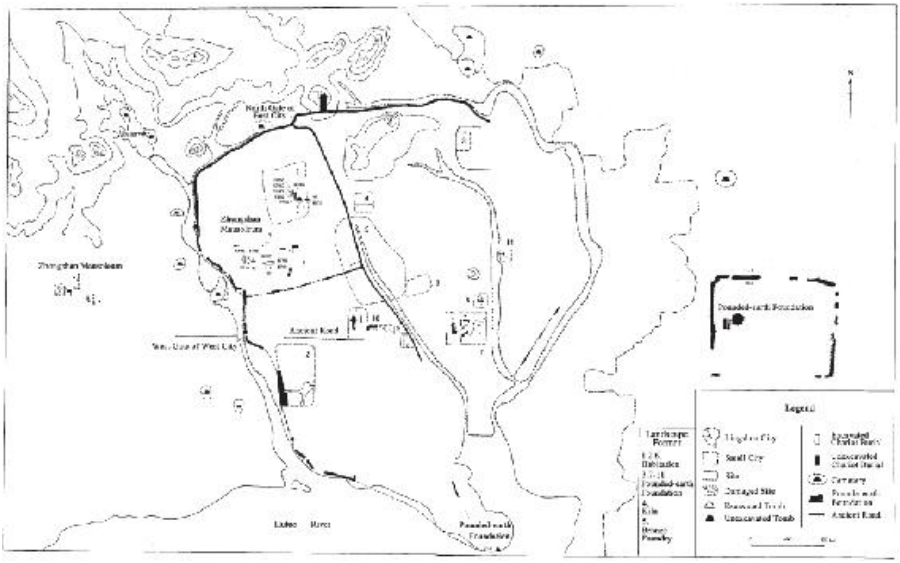


FIGURE 9.2. Plan of the ancient city of Lingshou (redrawn from Hebei sheng 2005, figure 2, overleaf between pages 12 and 13).

With the help of historical geography and archaeological surveys, archaeologists have found the ancient city of Lingshou. Located in Hebei province, ten kilometers from the modern city of Lingshou, it was surveyed and partly excavated from 1974 to 1993 (Hebei sheng 1996, 2005).

Ancient Lingshou was a walled city built to fit rugged terrain; a small hill was actually included within it, just inside the northern wall (Figure 9.2). The enclosed area must exceed 1,000 hectares, but no accurate figure is available from the reports. A partition wall cuts the city into an eastern and a western part. Rammed-earth foundations, probably of palaces and elite residences, are located mainly in the east (nos. 3, 7, 8, and 11 in Figure 9.2). The western part is subdivided into northern and southern zones by an east-west partition wall. The northern zone is a royal necropolis with two kingly tombs, each accompanied by a number of smaller tombs. One of the two has been excavated. The southern zone has several house foundations of moderate size and two big ones adjacent to each other (nos. 9—10 in Figure 9.2). The big ones together measure 750 by 450 meters. An east-west roadway 11 meters wide cuts through their center, and they are neatly floored with decorated bricks. This flooring reminded the excavators of the lanes of stalls in markets of the early imperial period, so they have tentatively identified this place as a market regulated by the state. Due north of it, on both sides of the north-south partition wall, are extensive remains of bronze and iron foundries (no. 5) and pottery workshops (no. 4).

In 1974, the excavators uncovered a second royal tomb complex, this one outside the city wall, to the west (Figure 9.2). Here the main tomb, the tomb of King Cuo of Zhongshan, is gigantic. The burial shaft, with two entrance ramps leading down into it, was originally covered by a pounded-earth mound about thirteen meters high with some buildings on top. The complex also includes burials of the king's wife, other people close to him, horses, chariots, and boats (Li Xueqin 1985, 95-98; Wu Hung 1999, 710-12, figures 10.30, 10.32; Wu Xiaolong 2004, figures 48—54 and map 4). The main chamber at the bottom of the burial shaft was looted long ago, but two flanking storage chambers survived intact (Hebei sheng 1996; Wu Xiaolong 2004). The grave goods deposited in the two chambers were mainly bronze and pottery ritual vessels, musical instruments, and jades. Three bronze vessels with lengthy inscriptions stand out. One of them has an inscription of 469 characters incised on the belly. This is the longest of all known Warring States bronze inscriptions. The second inscription is similar in content and only a little shorter (450 characters; Figure 9.3). The third is a sort of obituary for King Cuo composed by his heir Ci for a vessel that Ci contributed to the tomb. In this chapter, I will focus on the second inscription.

THE INSCRIPTIONS AND INDIVIDUAL AGENCY

The inscription is not too difficult to read, but what I want to emphasize here is the gap between what it says and what it was intended to convey to the audience it was meant for. A palaeographer who looked at it in isolation might feel quite content that he understands it. An archaeologist might feel that she could add some interesting context. However, a historian who wants to know what is really going on here is never going to be satisfied.

A translation is appended below (see appendix). Here is a synopsis: The inscription opens by saying that King Cuo of Zhongshan ordered his chancellor Gu to cast the vessel using metal captured from the neighboring state of Yan. Then it tells us why the vessel was cast: it was to be used in making offerings to a deity and to the former kings, and its inscription was to record King Cuo's deeds and to admonish his heir.

After this preamble, the text changes to a first-person speech delivered by the king. He begins by saying that, because he is eager to elevate the worthy, Heaven sent him a talented and loyal helper, his chancellor Gu, who took upon himself the cares of state. After singing

Gu's praises for a while, the king reports a crisis that confronted Gu, a shocking event in the state of Yan: the king of Yan abdicated in favor of *his* chancellor. King Cuo quotes Gu's reaction to this event. Gu says that he cannot bear the thought of his king having to deal on equal terms with a usurper, and he asks permission to "pacify" the state of Yan. Then the king says that Gu led the Zhongshan army against Yan and "destroyed all disobedience," to the acclaim of the lords of all the other states.

FIGURE 9.3. Square *hu* vessel from King Cuo's tomb, dated 314 BCE;

height 63 cm, maximum width 35 cm (after Hebei sheng 1996, vol. 2, color plate 7).

TABLE 9.1. Political actors in the states of Zhongshan and Yan.

State of Zhongshan	*State of Yan*
King Cuo	King Zi Kuai
Chancellor Gu	Chancellor Zi Zhi
(their apparent chancellor)	

The king concludes his speech by admonishing future kings to employ worthy ministers and to win the loyalty of the common people by virtue and righteousness. The inscription closes with a declaration that the king's words are true and that for the benefit of future generations they should be inscribed both on ritual bronzes and in the annals of the state.

So what we have here is a king's inscription, chiseled on a bronze made at the king's order, and purporting to tell us the king's thoughts: he wants to report his glorious deeds to gods and ancestors and to instruct his successors, we are told, and though he does not say so in so many words, he wants to justify his invasion of a neighboring state.[3]

Nevertheless, something does not quite fit. If the king is writing this inscription, why does the starring role go to his chancellor? Why is it the chancellor who receives the credit not only for proposing the campaign against Yan but also for winning the victory? Kings are not usually so self-effacing or so grateful. On the second inscribed vessel from the tomb the passage about Gu's loyalty and wisdom is even longer, and it appears again on the third vessel, in the obituary composed by King Cuo's heir. Apart from formulaic pieties, the display inscriptions of two kings are devoted entirely to lavish praise for a servant. This is very strange. How might we explain it?

We might begin by noticing an obvious symmetry in the cast of characters—a king and a chancellor in Zhongshan and a king and a chancellor in Yan (Table 9.1). According to the inscriptions, one chancellor has behaved properly toward his king and the other has not; one chancellor denounces the conduct of the other.

Perhaps what we see in this text is a king sending a message to ministers. One scholar has suggested that by publicly quoting Gu's denunciation of a usurping chancellor, the king is obliging his chancellor to take a public oath of loyalty: in effect, Gu promises here, in permanent bronze, that he will be faithful to his ruler (Wu Xiaolong 2004, 68). The king has extracted an oath of allegiance from a dangerously powerful subordinate—a returning war hero. He is warning his minister, or at least putting some pressure on him. We

might call this the Douglas MacArthur scenario.

But that is not the only possibility. Perhaps the chancellor Gu is already the de facto ruler of Zhongshan. Perhaps the inscription was drafted not by the king but by the chancellor; perhaps the king signed it because he was told to. The chancellor might be worried that other states will invade Zhongshan using the same pretext that Zhongshan used when it invaded Yan, and he wants to deprive them of that pretext by having his king proclaim that in Zhongshan all is in good order. Gu is putting words in his king's mouth. We might call this the Dick Cheney scenario.

The two scenarios seem equally plausible, and unfortunately, it is not hard to think of others.[4] Yet they differ in their assumptions about author, message, and audience—in other words, they differ about everything that matters. How do we choose the right one? Our problem is that the inscription is what the sociologist James Scott calls a "public transcript." Scott uses this term as "a shorthand way of describing the open interaction between subordinates and those who dominate. The public transcript, where it is not positively misleading, is unlikely to tell the whole story about power relations. It is frequently in the interest of both parties to tacitly conspire in misrepresentation" (Scott 1990, 2).

Our Zhongshan inscription is a public transcript in the most literal sense. It is displayed in fine calligraphy on solid bronze (Figure 9.3), and it purports to record a speech by the king, within which is embedded a speech by his chancellor. However, these are edited, meditated speeches.[5] We do not know how the final text was drafted: did it involve negotiations between the king and the chancellor? The inscription was intended as a message for somebody, but we are not sure who is sending the message, to whom it is addressed, or what it is. We do not know because we do not have what lies behind it: we do not have the "hidden transcript." Here is a famous hidden transcript that, awkwardly for the participants, was disclosed to the public:

> **No**. Well, that's one possibility. But also when these people go back before the Grand Jury here, they are going to pull all these criminal defendants back in before the Grand Jury and immunize them.
> **And** immunize them. Why? Who? Are you going to—on what?
> **Oh**, the US Attorney's Office will.
> **To** do what?
> **To** talk about anything further they want to talk about.
> **Yeah**. What do they gain out of it?
> **Nothing**.
> **To** hell with them.
> **Oh**, they're going to stonewall it, uh, as it now stands. Except for

Hunt. That's why, that's the leverage in his threat.
H: This is Hunt's opportunity.
P: That's why, that's why—
H: God, if he can lay this—
P: That's why your, for your immediate thing you've got no choice with Hunt but the hundred and twenty or whatever it is, right?
D: That's right.
P: Would you agree that that's a buy time thing, you better damn well get that done, but fast?
D: I think he ought to be given some signal, anyway, to, to—
P: [expletive deleted], get it, in a, in a way that, uh—Who's going to talk to him? Colson? He's the one who's supposed to know him.
D: Well, Colson doesn't have any money though. That's the thing. That's been our, one of the real problems. They have, uh, been unable to raise any money. A million dollars in cash, or, or the like, has been just a very difficult problem as we've discussed before. Apparently, Mitchell talked to Pappas, and I called him last—John asked me to call him last night after our discussion and after you'd met with John to see where that was. And I, I said, "Have you talked to, to Pappas?" He was at home, and Martha picked up the phone so it was all in code. "Did you talk to the Greek?" And he said, uh, "Yes, I have." And I said, "Is the Greek bearing gifts?" He said, "Well, I want to call you tomorrow on that."
P: Well, look, uh, what is it that you need on that, uh, when, uh, uh? Now look [unintelligible] I am, uh, unfamiliar with the money situation.

P = *President Richard Nixon;* **D** = *John* W. *Dean III;* **H** = *H. R. Haldeman.*[6]

President Richard Nixon and his advisors are talking about covering up the Watergate burglary. The tape recording of their Oval Office conversation is a hidden transcript par excellence. It differs from what the president said in public—the public transcript—on all sorts of levels, including linguistic (Pinker 1994, 222-30).

It seems safe to assume that behind closed doors, the same sort of conversation took place in Warring States oval offices, but what we have is only what was composed for public consumption. If Zhongshan invaded Yan, or the Watergate was burglarized, these were not accidents; they resulted from the conscious intentions of kings and chancellors. However, the Oval Office tapes are a luxury we will never have for Bronze Age politicians. Bruce Trigger once lamented that "[t]here is probably little hope of using archaeological data to study any significant problems related to interpersonal competition for power" (Trigger 1974, 96). Trigger's "probably little hope" is probably a little optimistic. When the historian has really detailed information

about the historical situation in which his actors are acting, he can make a guess at likely motives and intentions. Even without the tapes, it was possible to guess what was going on in Nixon's Oval Office. But detailed situational information is just what we do not have in archaeology, not even in the archaeologically recovered texts.[7]

Moreover, if the intentions of the agents elude us even when we are fortunate enough to have the longest-surviving Warring States bronze inscription for a source, how is the archaeologist to say anything about prehistoric power struggles? The prehistorian does not even have the public transcript. Every once in a while we need to take a sobering dose of Kemp's realism. If even the richest written sources leave the historian unsatisfied, the archaeologist cannot hope to supply what the historian lacks. Instead, we must keep our attention firmly focused on those aspects of past societies on which the material record can shed light. In other words, we must formulate questions that we have a realistic hope of answering.

What kinds of question about Zhongshan, then, might the historical archaeologist reasonably hope to answer? Let me describe two areas of interest that text-aided archaeology can profitably investigate. Examining concretely the possibilities of archaeology *with* texts should help us locate outer limits to what the archaeologist *without* texts can do. Certainly, the prehistorian cannot reasonably hope to say *more* about agency than his colleague with texts.

THE ARCHAEOLOGY OF INDIVIDUALS AND COMMUNITIES

A first area of interest is the identity of the Zhongshan state and its people. Who were these people, where did they come from, and how was their state formed? The inscription lists King Cuo's predecessors: "It was my august ancestors, Wen, Wu, ancestor [grandfather] Huan, and my late father, Cheng." Archaeology agrees with transmitted texts that the last capital of Zhongshan was inhabited only a short time, about eighty years according to the texts. Since the building of a city can be interpreted as a historical act (Houston et al. 2003, 216), we might wonder whether we can link that act with (1) a ruler on Cuo's list and (2) the occupant of one of the big tombs known to the archaeologists. If we can trust the transmitted texts that it was Duke Huan who relocated the capital to Lingshou, then it was he who caused the city to come into being through organized migration and new settlement. The archaeologists have tentatively identified his tomb as the one they have not yet excavated at the northwest corner

of the city (Figure *9.2);* the other tomb, 700 meters to the south, probably belongs to his son King Cheng. In this case the texts have not done much more than give us a name to attach to the occupant of a tomb and the founder of a city—they have only given us Ötzi's real name, so to speak—but of course texts sometimes tell more. The Egyptologist knows much more than just a king's name about the new city at Amarna and the royal tombs there.

For the Zhongshan people, archaeology has more to add to the testimony of the texts. The bronze inscriptions from King Cuo's tomb are full of references to the classics venerated in the Chinese states (Li Xueqin 1985, 106—7). If we had nothing but them to go by, we would group Zhongshan together with the other agrarian states as just another participant in a more or less uniform Chinese culture. The transmitted texts tell us a little more, pointing to a nonagrarian past by recording that the state was founded by nomads who settled down, but they say nothing of differences in King Cuo's time (Di Cosmo 2002, 93—125). But the grave goods from the tombs of King Cuo and King Cheng speak vividly of cultural differences. Along with the usual ritual vessels used in other states, the Zhongshan kings had barbaric regalia unknown anywhere else. The graduated set of vessels shown in Figure 9.4a (see also Figure 9.4b) was a standard Chinese emblem of royal authority in this period, but the giant tridents photographed with it have no parallel in the Chinese states; they are the sort of emblem of power that we might imagine, made in another material, standing outside a chieftain's tent. If, as the excavators believe, the trident shape alludes to the Chinese character for mountain, it might not be by chance that a small hill was enclosed within the walls of the royal city (the excavators interpret some clay pyramids unearthed at the foundry site as depictions of mountains; Figure 9.5).[8] The mixing of Chinese culture and nomad heritage appears even in single objects from King Cuo's tomb, for instance, in a Chinese caster's reinterpretation in gold- and silver-inlaid bronze of the animal-combat motif characteristic of steppe art (Bagley 2006, 25—26). Clearly, the cultural identity of the Zhongshan people was mixed. It was probably the outcome of a slow process that involved migration from northwest to northeast China accompanied by prolonged interaction with both sedentary farmers to the south and nomadic tribes to the north. Inscriptions and transmitted texts give no hint of the process, but archaeology can trace it back to the eighth century BCE (Lin Yun 2003, 120-21, 131).

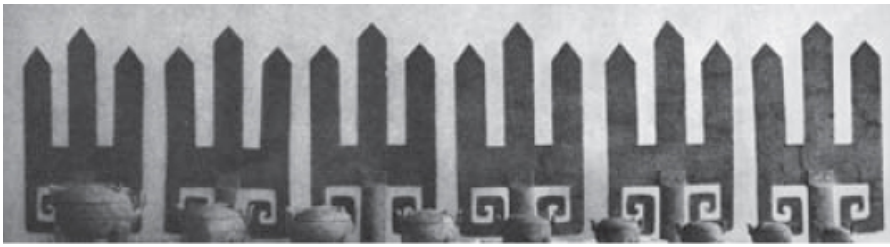


FIGURE 9.4a. Bronze tridents and *ding* tripods from King Cuo's tomb (after *Zhongguo wenwu* 4 [1980], 38).

THE ARCHAEOLOGY OF ECONOMY

An area in which archaeology can contribute abundantly is the sphere of economic life. The building of a new city may well have happened in consequence of a royal strategy we have no access to (Houston et al. 2003, 215), but the city once built had to sustain itself, and how it did this we can investigate. The bronze inscriptions tell us that Zhongshan had an army that plundered the neighboring state of Yan, transmitted texts record many wars with other states, and an army cannot support itself on the intermittent spoils of war—it needs rations. Quality-control inscriptions on some of the castings from King Cuo's tomb reveal a sophisticated division of labor in state-run bronze and iron foundries (Wu Xiaolong 2004, see especially chapter 5). Factory organization suggests that artisans too received rations from the state, so it comes as no surprise that the debris at the foundry sites includes large quantities of cups for standard measures. It seems that at least four measures can be distinguished: 900, 1,800, 2,250, and 3,600 milliliters (Figure 9.6). Many of the cups bear sealings of an official pottery workshop. The state's effort to standardize the distribution of food seems clear. But to learn more we need other evidence. To know how nutritious a soldier's diet was, we need the help of physical anthropology; to know how much grain he was allotted, we need ration lists and mathematical texts (cf. Kemp 2006, 171—79). Texts of the kind required are known from ancient China, but not from the time of King Cuo; the earliest that survive are a couple of centuries later.

FIGURE 9.4b. One suggested reconstruction of the tridents for decorating a tent (redrawn from Hebei sheng [1996], vol. 1, p. 286, figure 131).

FIGURE 9.5. A clay figurine interpreted as worshiping a group of clay mountains, from the foundry site at Lingshou (after Hebei sheng 2005, plate 14.1).

The provisions the state disbursed must have been obtained by taxing the population, but how? Did the state depend on a land tax paid in grain or in cash, or on a tax on herd animals or commerce, or on some combination of the above? No text or inscription talks about this. Archaeological surveys and excavations, on the other hand, do at least indicate multiple sources of wealth. The Zhongshan kingdom had a metropolitan area of about 1,000 hectares and a hinterland of 46,000 square kilometers. The western part of this territory is hilly, flanked by the Taihang mountains, which are rich in mineral resources like iron ores. Raw materials for the foundries apparently came from these local deposits (Hebei sheng 2005, 343—44). The eastern part of the territory is flat plains with productive agricultural land. Here the furnishings of ordinary graves show little evidence of a nomadic style of life (few ordinary graves elsewhere in the kingdom have survived unplundered); sacrificial animals are mainly dogs and oxen, with only a few sheep and horses (Lin Yun 2003, 130—31). Pottery and bronze coins are fairly common. Therefore, we may surmise that a large part of the population relied on agriculture and animal husbandry, the taxation of which, in kind or in cash, supported both troops fighting abroad and artisans working in the city.

The city dwellers engaged in craft and commercial activities. The large bronze and iron foundries were surely run by the state. Luxury bronzes were made for elite consumption; iron tools for agriculture and handicraft were distributed to farmers and artisans (Figure 9.7). However, without textual evidence we are unlikely ever to know how these products were distributed, nor will we know much about class divisions or anything about land tenure. Moreover, we must be careful not to think about the economy as a monopoly of the state. Private demands unprovided for by the state always exist. A decent burial in Zhongshan required fine black pottery, gilded bronze buckles, mirrors, semiprecious stone ornaments, and more. A decent life in the city required a house. Some of the individual's needs were supplied by the state through rations, rewards for military service, and perhaps wages paid to officials and artisans. Others he had to provide for himself.

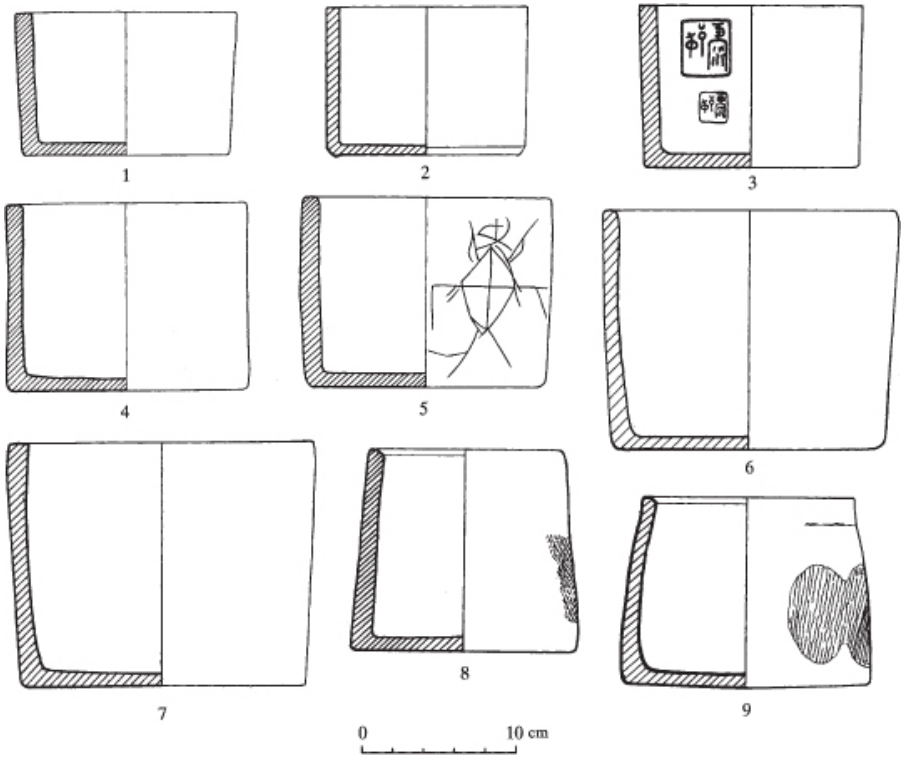


FIGURE 9.6. Measuring cups from Lingshou (redrawn from Hebei sheng 2005, 89, figure 65).

Individual enterprise might be resourceful in the extreme. One intriguing entry in a transmitted text describes the Zhongshan people, in a rather contemptuous tone, as apt to rob graves and counterfeit money (Swann 1950, 441). The authors of the excavation report cite this entry to explain why so many Zhongshan graves have been looted, but textual confirmation is hardly needed to convince us that the world's second-oldest profession had practitioners in Zhongshan. The implications of tomb robbery for the ancient economy have been drawn out by Kemp (2006, 313—15) in discussing the spectacular police and court records of thefts from Egyptian royal tombs. What these records do, he says, is "dramatize the existence of a crude urge for self-enrichment, which in more orderly circumstances would have been sublimated by participation in the marketplace, selling goods, renting or leasing land, making loans bearing interest." The offenders in the Egyptian court records were town dwellers who counted on being able to exchange looted objects for everyday goods and services. Given a public market of the kind that must have existed in Warring States China (Shen Chen 2003, 292—95), the robbers of modest tombs could easily have sold their loot openly for cash to customers shopping for grave goods for a deceased family member. Without a

smoothly functioning exchange system—a market—they would have had nothing to gain from their illicit activities. What is documented in Egypt for tombs at the highest end of the social scale must have happened everywhere lower down the scale.

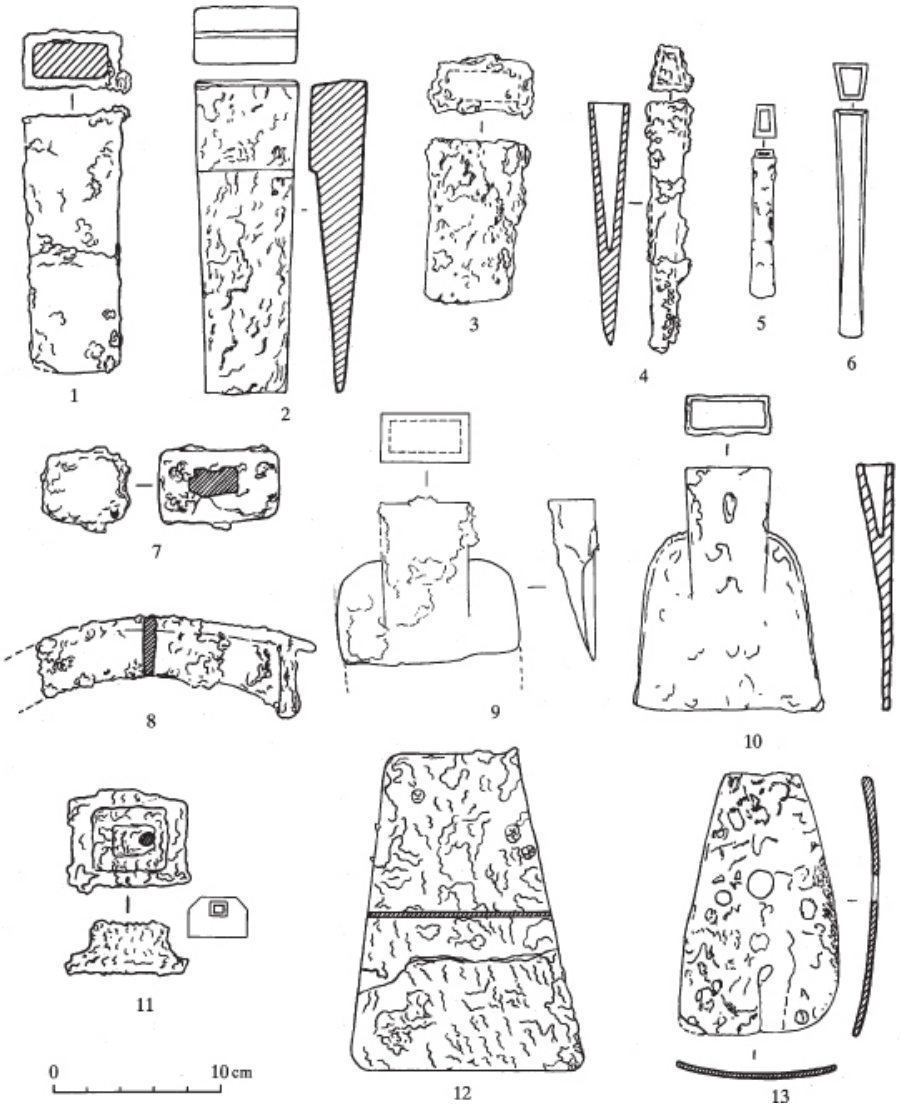


FIGURE 9.7. Iron farming tools from Lingshou (redrawn from Hebei sheng 2005, 78, figure 56).

As mentioned already, archaeologists have tentatively identified one building complex in Lingshou as a marketplace. The identification is far from certain, but the finding of many types of bronze coinage in tombs and throughout the city does argue for the existence of some sort of market economy (Figure 9.8a). A recently excavated text of slightly later date records the armed robbery of a woman who carried

cash with her on her way home from the market (Peng Hao 2007, 377—78; strips 197—228). Coin hoards and inscribed mold fragments from the Lingshou bronze foundry show that Zhongshan cast its own currency (Hebei sheng 2005, 113—14, figure 81 and plate 49). However, coins belonging to the states of Yan and Zhao have also been found. In the Lingshou marketplace, archaeologists have excavated a cluster of five small furnaces with many fragments of molds for casting coins (Figure 9.8b). The coins being cast were types current in Yan and Zhao. Someone, either a private individual or the state itself, was seeking to profit from counterfeiting. Interstate trade surely existed, perhaps on both official and private levels, although we do not know what goods were traded.

CONCLUSION

The foregoing discussion of the state of Zhongshan has shown how fragmentary and ambiguous the evidence at the disposal of a historical archaeologist is when compared with, for example, the evidence a historian or sociologist can bring to bear on a modern society. Only occasionally do we catch glimpses into the world of individual agency. Perhaps our best hope of recovering intentions lies in the realm of the making of artifacts, in other words, in the history of technology and in art history, where the maker's thinking is in some measure directly recorded in the artifact. The spectacular bronzes and jades from King Cuo's tomb invite this kind of investigation (Bagley 2006; Wu Hung 1999, 689—92; cf. Englehardt, this volume). But that is another study, and in any case, few archaeologists are trained or interested in these sister fields; they are concerned with other types of intentions. And for them, unfortunately, as Kemp observes,

> [t]he study of the past cannot ... be anything other than an approximation, a fairly crude puppet-show. This does not prevent it from being both instructive and enjoyable, but it is important not to lose sight of the fact that the more we choose a narrative style of history, locate heroes and villains and tell a good story, the more we veer towards soap-opera and away from contemplating the infinitely complex human biomass that is a society and that is, in reality, almost beyond our reach . . . Most of the desirable evidence has irretrievably gone, ruling out any serious kind of quantification or deep exploration of what brought about changes. What remain are the conventional tools of metaphor and the tradition of arts-and-humanities essay writing on the broad themes that pervade the study of human thought and behaviour, as well as some control over the evidence selected. And a realization of the scale of our

approximations and a generosity towards alternative interpretations. (Kemp 2006, 5, 7)

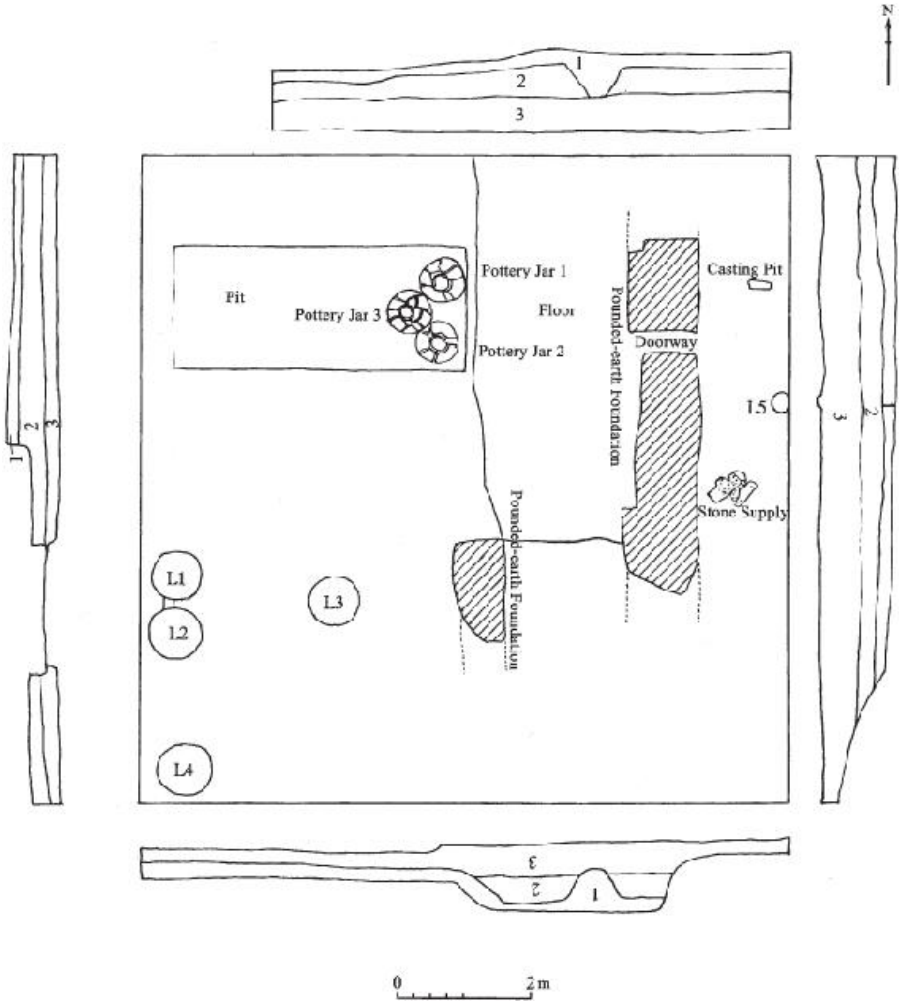


FIGURE 9.8a. A possible private foundry at Lingshou for illicit casting of bronze coinage. L1 to L5 are small furnaces outside a building (hatched part) (redrawn from Hebei sheng 2005, 40, figure 26). The three pottery jars contain six molds for casting one type of coinage and two for another type (Figure 9.8b); both were official coins in two neighboring states.

FIGURE 9.8b. Stone molds for casting coins (see Figure 9.8a) (after Hebei sheng 2005, plates 49.2 and 49.3).

Kemp laments the inadequacy of his sources from ancient Egypt. Yet what archaeologist could fail to envy him his shelves of reports on tombs of all sizes, workmen's villages, abandoned royal cities, rolls of papyri, detailed pictorial representations of almost every conceivable activity, and more? The material remains of a prehistoric village do not begin to compare in information content. Ian Hodder, head of an international team working at the Çatal Hüyük site (Hodder 2006), is famously confident of his ability to recover meanings from prehistoric remains, but the Mayanist Stephen Houston does not share his optimism:

> It seems imprudent of Hodder to illustrate his point with megalithic monuments, surely among the most opaque semantic productions from the ancient world. To say that Stonehenge relates to solar movements is like observing that Mormon temples face east. Is this the kind of detail Hodder means, and is it sufficient, as seems doubtful, for any deliberation of intended and received meaning? As an undergraduate attending the University of Edinburgh, the author dug at a henge site in Scotland. From firsthand knowledge, therefore, he is perplexed why the scholars most intrigued by paleo-phenomenology work on periods where independent controls on speculation are nearly nonexistent.[9] (Houston 2006, 150n2)

Using archaeology, inscriptions, and transmitted texts together, I have managed to say only a very little about individual agency in ancient Zhongshan. But imagine for a moment that the Zhongshan inscriptions were written in an undeciphered script, and that no other written evidence from ancient China was available to the excavators of the Lingshou site. If we had nothing to go on but material remains, the archaeology of the fourth-century Zhongshan kingdom would be

prehistoric archaeology. How much would a prehistorian be able to tell us about kings and chancellors and their motivations for warring on neighboring states? Zhongshan's wars—which ended in its destruction thirteen years after King Cuo's death—were major events that affected the lives of every inhabitant. But what could a prehistorian tell us about any of the responsible actors and decisions? Could he even tell us that the wars happened? The image of the peace-loving Maya was created, let us remember, not by fanciful journalists but by serious scholars who, able to read only the numbers in the Maya script, put two and two together and came up with gentle astronomer-priests. As a historical archaeologist, I can say a little bit about individual agency. But if I were a prehistorian, my ambitions would have to change.

ACKNOWLEDGMENTS

I thank Joshua Englehardt for inviting me to the symposium and commenting on my drafts. Robert Bagley, John Baines, Stephen Houston, Lai Guolong, Barry Kemp, Newell Ann Van Auken, Wu Xiaolong, and two anonymous reviewers gave me constructive comments on drafts of this chapter. The drawings were made by Cao Dazhi and Weng Wenjing.

NOTES

1. "Agency" appears in the index to the second edition of Bruce Trigger's *A History of Archaeological Thought* (2006) but not the first edition (1989). On its explicit theorizing, see Dobres and Robb (2005).

2. On human societies see de Swaan (2001).

3. The text on Tikal Stela 31, discussed in Englehardt's chapter in this volume, does not appear to explain on which ground the previous dynastic order at Tikal was replaced by a new one, possibly originating from Teotihuacán.

4. For example, perhaps the chancellor was loyal to his king and the two of them drafted the text together to advertise their unanimity to other court officials (the chancellor's enemies?) and other states. A Western example of this type of relationship is that between the Spanish king Philip IV and the count-duke of Olivares in the seventeenth century, vividly described in *A Palace for a King* by Jonathan Brown and John Elliott (2003).

5. In this volume Michael Carrasco argues that most of the first-person discourses on Maya vases and monuments depict dialogues

between characters within a pictorial narrative scene. Even if we can make an analogy with the Zhongshan inscription without a picture accompanying the latter, the dialogue between King Cuo and Chancellor Gu would have to be a public one, like those depicted on the Maya vases.

6. From Pinker (1994), 222–23.

7. As Barry Kemp reminds me (personal communication, March 12, 2010), "the nearest we come to behind-the-scenes talk in the Bronze Age is to be found in the Amarna Letters." Reading these diplomatic letters one is struck by the comical naïvety of the overlords and vassals in the ancient Near East. As Kemp puts it, the writers "are prepared to dish the dirt on named enemies, but for much of the time they deal with one another like village neighbors, jealously comparing the value of gifts received." Kemp wonders whether important political decisions have often, if not always, been made "on the basis of crude motives of injured pride, greed, etc." His modern example is Britain's war against Iraq: "It now looks pretty clear, by his personal admission, that Mr. Blair committed Britain to the invasion of Iraq on a gut feeling that overrode rational assessments." It seems to me that these examples underline the importance of direct access to the actors' inner minds through written and oral means, something rarely available in archaeology. For the Amarna Letters, see Moran (1992).

8. The excavation report says that the clay pyramids and the human figurine were found in front of a furnace, in the arrangement shown in Figure 9.5, with the pyramids to the north of the figurine. It suggests that the pyramids correspond to the mountains north of the city and that the person facing them might be praying to them. Perhaps, the authors say, this was the foundrymen's way of praying to a mountain god before casting a bronze. Remembering the tridents and the hill inside the wall, or perhaps just influenced by the state's name—Zhongshan means "central mountain(s)"—they suggest that the Zhongshan rulers worshipped mountains, and they take the clay figurines to show that the common people did too (Hebei sheng 2005, 37–38, 344). How much confidence do we want to place in this conclusion? Might the figurine and pyramids instead be counters for a game?

9. Robert Bagley, writing about the interpretation of designs, suggests that for some interpreters at least, the absence of independent controls is precisely the appeal of prehistory: "I have to confess to a cynical suspicion that iconography without texts flourishes because it is safe: prehistoric symbols can be interpreted without fear of contradiction ... I doubt that anyone would claim the ability to penetrate Egyptian iconography without help from texts" (2008, 53).

APPENDIX: INSCRIPTION ON THE *FANG HU* VESSEL OF KING CUO OF ZHONGSHAN

It was in the fourteenth year [of the king's reign] that King Cuo of Zhongshan commanded the chancellor of state, Gu, to select the auspicious metals of Yan and to cast a sacrificial *hu* vessel, according to the required measurements of the pure sacrifice, [which] can be taken as norm and constant [rule] in order to present [in a feast] offerings to God on High, and in order to make sacrifices to the former kings. Solemn and dignified, earnest and reverent, and not daring to be idle or negligent, [thus] he took this opportunity to record what was praiseworthy, and brilliantly inscribe the lofty merits—to have rebuked the changes of Yan's [leadership]—and so to warn succeeding kings.

It was my august ancestors, Wen, Wu, ancestor [grandfather] Huan, and my late father, Cheng: those ones, who being in possession of pure virtue, and the handed-down instructions, by extending them [down through time], made them reach the sons and grandsons to use. It is what I imitate: being merciful, filial, broadminded, and kind, they promoted the worthy and employed the competent.

Heaven did not weary of what one [i.e., I] greatly wished and caused [me] to obtain the wise knight and good assistant, Gu, to aid and advise his person [i.e., me, the king]. I, knowing that he is loyal and trustworthy, turned the responsibility of the state over [to him]. Therefore, [rather than] divert himself with food and drink, he preferred to have worries and concerns. Gu, exhaustive in [carrying out] his goals, was extreme in his loyalty and wisdom in assisting [me], his ruler. With no treachery in his heart, he took on the responsibility of assisting the state. With no case of laxity from morning to night he promoted the worthy and set up the competent, with no chance to be drawn to rest, in order to illuminate the king's [i.e., my] glory.

He encountered [the case of] the ruler of Yan, Zi Kuai, with no regard for the great proprieties and without safeguarding [the position of a] feudal lord, a servant and a master exchanged positions, thereby on the inside [the state's internal affairs] breaking off the [handed-down] work of Duke Shao [the founder] and voiding the sacrifices to the former kings; bringing the matter to the outside [the external affairs of state] then he intended to [have him] ascend [to the position of being able] to pay visits to the temple of the Son of Heaven and withdrew [himself] from participating in the ranking of the feudal

lords by seniority at the meetings and conventions; [so] above [affairs of state in relation to heaven], he went counter to heaven, and below [affairs of state in relation to the rules of man], he did not accord with man. I, for one, am not for it!

Gu said, "To act as a man's servant yet to let a servant reverse [the role of] his master, as for being inauspicious, there is nothing greater than this! But to have intended him to stand on the same level of seniority as my lord [to participate with my lord standing by his side in age (rank)] at the meetings and conventions is something that I, your servant, cannot bear to see! I, Gu, desired attendant knight [knights who follow in attendance] and grandees in order to pacify the borders of the state of Yan.

"Because of this, then I took on a tiger-skin buffcoat and a helmet to destroy [all] disobedience. Since the old ruler [of Yan], Zi Kuai, and the new ruler, Zi Zhi, did not employ proper rites and decorum, and did not distinguish disobedience from obedience, therefore the state was ruined and they [themselves] died: there was not even a single man who [tried to] save them. [He] subsequently secured the positions of ruler and servant and the hierarchy of those above and those below, and has been favored with the chance to have achieved merit and to open up and expand the walled borders. The Son of Heaven did not forget whatever merit one [i.e., I] may have; he made an elder [official] to brevet [me] in award with [the title] Zhongfu. The feudal lords all congratulated [me]."

Those sage kings of old, considered obtaining the worthy men their duty, and by virtue of that they won over the people. Therefore, [if a king is] respectful in words and decorum, the worthy men will come. If the widespread love is deep, the worthy men will be close [at hand]. If the levied taxes are moderate, then the common people will be attached [to the ruler].

Ah! True, indeed, are such words! Clearly inscribe them upon [this] wine vessel, to be seen on it throughout time. With full respect and deep reverence, clearly proclaim to future generations: it is disobedience that gives rise to disaster and it is obedience that gives rise to blessings. Record it in the bamboo annals to warn succeeding kings: it is virtue that will keep the people attached [to the ruler]; it is by righteousness that one may last long [as a ruler]. May the sons of sons and the grandsons of grandsons forever treasure and use [this] without limit.

[*slightly modified after Wu Xiaolong 2004, 107–11*]

TEN

Structuration and the State in Mycenaean Greece

Dimitri Nakassis

At first glance, Mycenaean Greece is an odd place to examine early writing and agency. The Mycenaean writing system, Linear B, is a syllabic script used to write the earliest known form of the Greek language (ca. 1400–1200 BCE). Linear B was inscribed with a stylus on sealings and tablets whose clay was still moist (Figure 10.1); it was also painted with a brush on large transport vessels known as stirrup jars. The authors of all these documents are anonymous scribes. The texts themselves are all highly laconic, temporary economic records that circulated among a restricted group of administrators. The clay tablets are sometimes dismissed as ancient "laundry lists" and "drab and lifeless documents" (Chadwick 1976, ix). No literary, epistolary, judicial, or private texts survive, if they ever existed. Consequently, Mycenaean writing does not shed light on political history, as other early writing systems do (compare Englehardt and Wang Haicheng, this volume). The extreme economy of Mycenaean writing extends to the composition of the documents themselves, such that additional information about historical actors is rarely included. The personal names and identities of many important officials of the palace, including the king *(wanax)* and his second-in-command *(lāwāgetās),* are unknown or uncertain.[1] There are also theoretical impediments in place. Studies of Mycenaean political structures, especially those based on the documentary evidence, have been dominated by the view that the palaces "radically centralized all economic, administrative and bureaucratical *[sic]* operations and monopolized all aspects of public life" (Deger-Jalkotzy 1996, 724–25). This leaves little room for agency outside of the palatial elites, who are themselves conceived as no more than impersonal bureaucrats (Bennet 2001).

To conclude that this situation is not amenable to agency approaches assumes, however, that agency is a property of individuals who actively create social life or history through intentional,

purposive decisions. In this chapter, I argue that discussions of agency in archaeology have focused far too much on voluntaristic agents at the expense of the properties of social structure(s). Indeed, I conclude that one of the most constructive uses of agency theory in archaeology, although certainly not the only one, is as a tool for analyzing social structures and institutions such that they are not monolithic and static artifacts but dynamic processes, and such that their constitution can be related to concrete social practices located contextually in space and time. I illustrate the value of this approach through a case study of the Linear B tablets at the site of Pylos and the light they shed on the operation of the Pylian state at the end of the Late Bronze Age.

A THEORY ABOUT AGENCY?

One of the well-known problems with agency in archaeology is that it has come to mean everything and nothing—an "ambiguous platitude," in the words of Dobres and Robb (2000, 3). In my view, a significant part of the problem is the use of the term "agency theory" in the first place. Indeed, the use of this phrase to refer to literature that deals with the relationship between agency and structure is idiosyncratic; sociologists consistently refer to this literature as "structure and agency" or "structuration" (Parker 2000). The term "agency theory" encourages the idea that this literature constitutes a theory about agency. In fact, it is not a theory but a general approach with which individual theories are more or less compatible (Giddens 1984, 326—27), and it is not interested in agency, especially as it is usually defined in lay and sociological discourses, as "volitional, purposive and intentional aspects of human activity" (Jary 2006, 8). Structuration instead focuses on the recursive relationship of structure and agency, conceived as action by knowledgeable agents who could have done otherwise (Giddens 1984, 8—9). The swing of the pendulum toward voluntarism in archaeological literature can be explained in part by the fact that agency theory entered archaeological literature as part of the post-processual critique of functionalist tendencies of the New Archaeology (e.g., Hodder 1982). In any case, agency theory has often become code for the study of past strategic behavior by historical actors. Some archaeologists have concluded that agency represents the transformative power of great men like Julius Caesar or Shaka Zulu (Flannery 1999); for others, it means the ability of humbler individuals to make everyday choices contrary to the will of the community and its cultural norms (Morris 2004). This emphasis on the individual and his capacity—agents are almost always elite men (Gero 2000)—to act *on* or *against* structure

produces a model in which agents create the social world, largely unfettered by cultural constraints (David 2001). In the rush to introduce agency into archaeological narratives, archaeologists have lost sight of the vital insights of the social theorists whose writings inspired agency approaches to the archaeological record in the first place. These theorists reject not only determinist models in which agents are epiphenomena of structures that work "behind the backs" of social actors but also voluntaristic models in which structures are the epiphenomena of agency.[2]

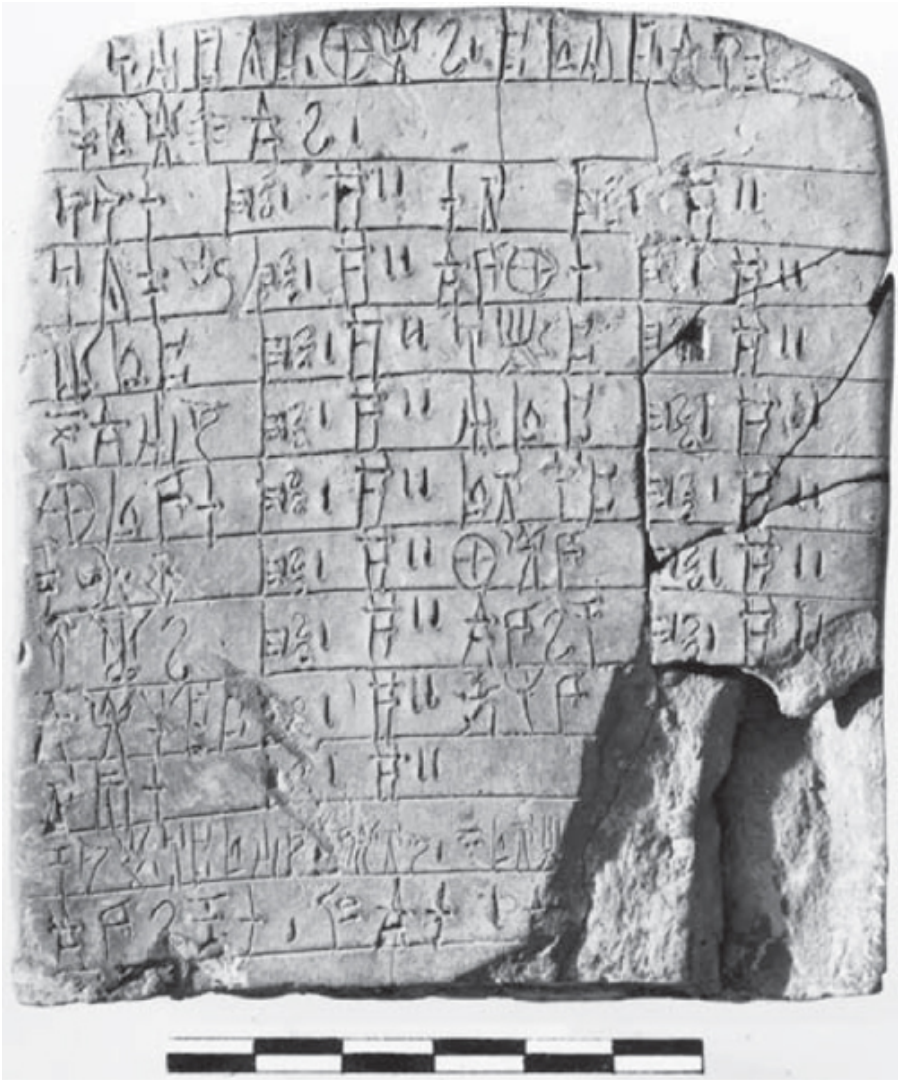


FIGURE 10.1. Pylos tablet Jn 750. A record of twenty-one or more named smiths, seventeen of whom have been allocated metal by the palatial authority; the remainder are listed without an allocation; height 11.2 cm, width 9.7 cm, thickness 1.4 cm (photographic

archives of the Program in Aegean Scripts and Prehistory, University of Texas at Austin; courtesy of the Department of Classics, University of Cincinnati).

I prefer to speak of structuration, because this neologism coined by Anthony Giddens emphasizes that structures are historical processes (Giddens 1984). The central concept of structuration is the duality of individual practice and social structure: social structures are both generated by and generative of action; they "are both the medium and the outcome of the practices that they recursively organize" (Giddens 1984, 25). The term "structuration" captures the spirit of Giddens's and Pierre Bourdieu's works, which are in some ways best understood as sustained criticisms, through reflection on Marx, of functionalism and structuralism (Bourdieu 1990b, 7–12; Giddens 1984, xxi).[3] The main target of their attack is the notion that structure and system are the "real" social forces and consequently constitute the proper object of social inquiry. The term "structuration" reflects, moreover, the fact that these authors are largely interested in explaining how regularities in human behavior arise in the absence of a set of rules that mechanistically determine the activity of actors. The emphasis, then, is on unpacking social structure: neither Bourdieu nor Giddens has a very strong theory of the agent. Indeed, from a structurationist perspective, it makes little sense to construct a universal theory of the agent. Since structures are historically formed in particular times and places and are partially internalized by socialized agents, it makes little sense to talk about agents, except in a general sense, outside of a given temporal, social, and material context (Bourdieu 1977, 87–95; 1990b, 31–32; Bourdieu and Wacquant 1992, 135–37; Giddens 1984, 25).

With this in mind, two consequences of the excessive focus on agency in archaeology seem to me particularly problematic: the conflation of agency with intentionality and social change, and the simplistic view of structure. The former is commonly encountered in archaeological discussions of structuration. In contrast to the "faceless blobs" who are helpless in the face of large-scale processes in certain approaches associated with processual archaeology, agency approaches sought to produce accounts in which these same processes are the result of historical actors and their activities (Brumfiel 1992; Tringham 1991). Consequently, many have associated agency with the power to effect social change through consciously goal-driven activity (Kuckelman 2008, 120; Perry 2008, 89; compare Englehardt and Wang Haicheng, this volume). Leaving aside the theoretical problems with this definition of agency, which have caused both Giddens and Bourdieu to reject it outright (Bourdieu 1990a, 42–52; Bourdieu and Wacquant 1992, 120–26; Giddens 1984, 8–9), all too often agency (as

power to effect change) is attributed to political leaders who constantly seek to expand their control over a passive society, as Pauketat (2007, 31–42) has pointed out. Yet the power of structuration is precisely its ability to account for the regularities and variations in practices, particularly the mundane and quotidian. Everyone capable of acting otherwise is an agent, and agents monitor their own activity both discursively and tacitly (Giddens 1984, 5–16). Consequently, a structurationist approach should consider the activities of all agents for which there is evidence, not simply ruling elites, and it should take into account not only intentional strategic activity but also the practical consciousness that guides most conduct. Indeed, the emphasis on practical consciousness and routine behavior in structuration has provided a rich source of inspiration for archaeologists to unpack the complexity of seemingly static institutions and periods (Gardner 2007; Robb 2007).

The second problem that arises from the emphasis on agency is that structure is too often conceived of as a single concept in archaeological discourse (Varien and Potter 2008, 9–12). That is, the word typically appears in the singular in archaeological literature rather than in the plural. It is true that although Giddens (1984) speaks of multiple social structures, Bourdieu's *habitus* is a unitary concept consisting of a tightly bundled system of dispositions (Bourdieu 1977, 78–87; 1990a, 52–65). Bourdieu argues that in traditional and ancient societies, objective and subjective realities correspond perfectly; this is the experience of *doxa* (Bourdieu 1977, 164–66).[4] As Sewell has pointed out, however, there is no community in which all social structures are fully homologous (Sewell 1992, 16–18; cf. Ortner 1989; Smith 2001). Indeed, he argues that social change is made possible by several distinct factors: there are many structures, the rules or schemas governing these structures can be applied in different social situations, resources accumulate unpredictably and are potentially polysemic, and structures intersect and overlap with each other (Sewell 1992, 16–19). It may be that in "traditional societies," structures tend to be more compatible with each other and mutually reinforce each other, but complete compatibility of structures can hardly be assumed. Indeed, making this assumption may lead to the functionalist fallacy whereby the existence of a historical structure is explained by virtue of its function in supporting other structures or the entire social system, a criticism leveled at Bourdieu (Archer 1993; Parker 2000, 75–76). Social life is organized by many structures, which may intersect with each other in complex ways: certain structures may reinforce one another, whereas others may exist in tension or contradiction.

AGENTS AND STRUCTURES IN LATE BRONZE AGE PYLOS

This discussion of the relationship between agency and structure allows us to reconsider our Late Bronze Age "laundry lists." The quotidian nature of the Linear B tablets, scorned by some, is an asset for an analysis that makes use of structuration. Because the tablets are temporary documents that all relate directly to the administration of relatively small polities, they provide detailed evidence for the day-to-day operations of the Mycenaean state and the individuals responsible for these activities. We may consequently examine the structuration of the Mycenaean state: the mechanisms by which the Mycenaean state was reproduced through the actions of agents and how the state at once enabled and constrained individual practice.

Because different Mycenaean states were differently organized (Shelmerdine 2008, 148–50), I focus my discussion on the palatial site of Pylos, which at ca. 1200 BCE was the center of a polity of ca. 2,000 square kilometers carrying a population of approximately 50,000 individuals (Bennet 1995, 587; Whitelaw 2001, 64). Pylos has the best-preserved Mycenaean palace excavated to date (Blegen and Rawson 1966; Blegen et al. 1973; Lang 1969), which includes the most complete textual data set of approximately 1,000 tablets (Bennett and Olivier 1973–1976), and its hinterland has been extensively documented by archaeological surveys and other projects (Cosmopoulos 2006; Davis et al. 1997; McDonald and Rapp 1972). The regional and archaeological context of the tablets is therefore well understood, and this is all the more important because the texts at Pylos, with a handful of exceptions, date to a single chronological horizon.[5] The Linear B texts were temporary administrative documents made of clay that were never intentionally baked but were only preserved when accidentally fired; at Pylos, nearly all records date to the fire that attended the final destruction of the palace (ca. 1200 BCE). The unfortunate consequence is that study of diachronic change is not possible through the study of the texts; on the other hand, this well-contextualized snapshot does provide the possibility for a microanalysis of the administrative operations of the palatial center at Pylos.

We can access the agency side of the agency-structure duality through study of the activities of individuals and groups identified in the Linear B texts. About 4,100 people, identified individually or as part of a group, appear in the Pylian documentation (Hiller 1988, 60). Of these, some 800 are identified by personal name. These named individuals appear in a variety of contexts, but over three- quarters

are attested in five major groupings of texts: (1) personnel registers, including a subset of texts dealing with military service (An series); (2) lists of individuals responsible for animal husbandry (Cn series); (3) disbursements of rations and other payments of staples (Fn series); (4) landholding documents (E-series); and (5) disbursements of bronze or copper to named smiths (Jn series; see Figure 10.1). The tablets therefore provide evidence for a variety of administrative activities carried out by a significant number of named historical actors. Of course, only those activities that were overseen directly by the palace were recorded; the texts are also fragmentary (individually and as a corpus) and do not represent the entirety of actual activities undertaken by these individuals for the palace. Because these individuals are identified by personal name, and occasionally by additional information such as patronymic, status, or official title, it is also possible to tie specific activities to particular historical individuals (see below).

The corresponding structures are those that relate to administrative operations: landholding, various types of craft production, military service, and so on. It is also possible to see the state itself as a structure (Sewell 1992, 24). Indeed, the state fulfills the definition of a structure by Giddens: it is composed of virtual rules (administrative procedures) and resources, both allocative (the physical form of the palace, access to land, and produced goods in palatial stores) and authoritative (the coordination of labor, storage of information through writing). It both enables and constrains the activities of agents. The state is also only present insofar as it is instantiated in daily practice, as is vividly illustrated by the rapidity of the collapse of the Mycenaean states, which is especially precipitous in the case of Pylos (Harrison and Spencer 1998). On the other hand, what makes the state so complex to study and difficult to define is the way it interacts with other structures, bringing them into relationships of integration and contradiction (Bourdieu 1999; Bourdieu and Wacquant 1992, 110–15). As Giddens (1984, 196) suggests,

> as they generate and consolidate centralized power, "drawing in" various aspects of social activity within their scope, states stimulate the development of other ties and interconnections which cut across the social and territorial realms over which they claim sovereignty. Structural contradiction in this context concerns the sovereignty of the state over a given territorial area, which is antagonistic to and yet depends upon processes that cut across that sphere of jurisdiction and involve different mechanisms.

Studies of ancient states have increasingly relied on the insights of structuration to model the internal organization of these institutions

(Blanton 1998; Campbell 2009; Smith 2003; Yoffee 2005). Rather than seeing the state as an impersonal processor of information and mechanism of control, many critics now view the state as the result of widespread interactions among agents with different goals and resources at their disposal.

This perspective is particularly useful for the study of the Mycenaean state, because it flies in the face of most Mycenaean literature on the palatial administration, in terms of both its relationships with other structures and its internal composition. The palace is usually considered a powerful organization whose control was "pervasive, monolithic, and monopolistic" (Bennet 2001, 25). The basis for this dominance is thought to be economic: the palaces were the central nodes in fairly elaborate redistributive economies (Finley 1999, 28; Killen 2008). This model of palatial dominance in all things economic and social has been challenged, largely by archaeologists who see the palatial control as far more selective, in terms of both the economies that may have been entirely or predominantly outside of palatial purview and the spatial distribution of palatial authority (see especially the chapters in Galaty and Parkinson 2007). It seems clear that the model of palatial dominance can no longer be sustained, at least in its most extreme form (de Fidio 2001; Killen 2008, 180–81). Rather, scholars disagree over the overall extent of palatial control and attempt to untangle the nature of palatial interventions in specific fields, such as ceramic production and consumption (Galaty 1999; Knappett 2001; Whitelaw 2001).

In the traditional model, the palace was internally organized as a hierarchical, centralized bureaucracy, with the king *(wanax)* at its summit (Shelmerdine 2008, 127). Arrayed beneath the king were a variety of other officials: the second-in-command (the *lāwāgetās)* and the "followers" of the king *(hekʷetai)* belonged to the administrative core, as did the "collectors," a group of individuals who are not known by any title save the one invented for them by modern scholars (on issues of definition, see Rougemont 2001). Members of the local administration included "service men" in charge of land *(telestai);* provincial magistrates *(da-mo-ko-ro);* district governors and vice-governors *(ko-re-te-re, po-ro-ko-re-te-re);* religious officials such as priests, priestesses, and keybearers *(hiereus, hiereia,* and *klāmphoroi);* local chiefs *(gʷasilēwes);* and so on. Outside of this small group of named officials are the "lower classes": craft specialists and small landowners and then slaves *(doheloi)* and fully dependent laborers (Chadwick 1976, 69–83).

An important issue for Mycenaean studies is the composition and role of non-palatial elites in the Mycenaean world. It seems clear that

these individuals were an important part of the operation of the palace and its interaction with local communities, and could have had an important role in economic and social activities that were distinct at some level from the central authority (de Fidio 2001, 19–23). Study of these individuals might also allow us to refine, or even break from, the current understanding of Mycenaean state and society, which rests primarily on well-defined static roles—king, aristocratic follower, governor, smith, dependent laborer, slave—that collectively replicate the model of monolithic state control. Conveniently enough, the texts provide a means to investigate this issue through the personal names that form the bulk of the lexical items in the texts. The scholarly consensus has been that most of the individuals identified by personal name were low-status laborers, because they included herders and banausic workers such as smiths. About three quarters of these individuals appear only once in the preserved texts. Where names appear more than once, it can be shown that in most cases one name corresponds to one individual (Nakassis 2006, 2008). The procedure identifying individuals from recurring names is probabilistic; of the 190 certain names that appear in more than one series of text, identification is certain in 88 cases (47%) and probable in 140 cases (74%). This argument was made possible by the naming conventions in Mycenaean society, especially the large number of names relative to the number of individuals, and the nature of the Pylian documentation, which is highly concentrated in time, place, and function.[6] Consequently, we can identify a relatively large group of individuals who are apparently responsible for multiple economic and administrative activities. This advance, which allows us to combine previously disconnected bits of information to offer descriptions of the activities of specific individuals, significantly increases our ability to examine the agency side of the agency-structure duality.

Because the documents from Pylos date to the same year, the activities of named individuals are virtually synchronous. Consequently, individuals with multiple responsibilities must have carried them out simultaneously or virtually so; for instance, twenty-eight smiths are also herders of palatial flocks, even several flocks located in different parts of the kingdom, such as the individuals named Awekseus *(a-we-ke-se-u)* and Plouteus *(po-ro-u-te-u)*. Awekseus herds palatial sheep in the northwest and southwest of the Pylian polity and is allocated bronze to be worked into finished goods in the northwest, whereas Plouteus herds sheep in the northwest, goats in the northeast, and is allocated bronze in the southwest (Figure 10.2). Working bronze was almost certainly a part-time activity undertaken by individuals who were also landowners (Killen 1979), but herding flocks was surely a full-time job. It is usually assumed that the names

of men responsible for these flocks were actual herders in the field, but there is actually nothing in the texts that requires this interpretation; they are not even called herders, although this term is attested elsewhere *(poimēn, po-me)*. We may instead hypothesize that these men were supervisors responsible for ensuring that the animals were taken care of and wool was delivered to the palatial authority. The plausibility of this suggestion is strengthened by the fact that these individuals must have had substantial personal flocks of their own, since sheep that died in the field were required to be replaced by the shepherd's own animals. Indeed, there is evidence that at Mycenaean Knossos shepherds freely moved animals from their personal flocks into palatial flocks and vice versa; shepherds could have benefited from this arrangement by removing fat palatial wethers for consumption or ewe lambs for rapid expansion of personal flocks (Halstead 2001, 42–43).

These named individuals were not a homogeneous group. Most appear in only one administrative context, and others were, like Awekseus and Plouteus, more widely involved in economic activities. There are also a small number of individuals who are identified by personal name and are intimately involved at the highest level of the palatial administration. For example, there are four individuals at Pylos who are categorized by modern scholars as "collectors," although there is no such title in Mycenaean Greek. Rather, these men are identified as collectors because their names occasionally appear in the genitive in records of palatial flocks of sheep and goats, sometimes with the term *agorā (a-ko-ra),* meaning "collection" (the names of the herders are nominative or dative). Using this criterion, there are four collectors at Pylos. They are usually considered as a group, although their activities are strikingly diverse from one another. Indeed, it is symptomatic of the state of Mycenaean studies that although there is no ancient term for the collectors, textual scholars operating under the bureaucratic model were so uncomfortable dealing with individuals on their own that they invented a modern term. The most prominent of these individuals, Alksoitās *(a-ko-so-ta),* appears on thirteen tablets and is an extremely active member of the palatial administration. Among his activities are an inspection of agricultural land, the receipt of furniture, and the distribution of aromatics for the production of perfumed oil (Nightingale 2008).[7]

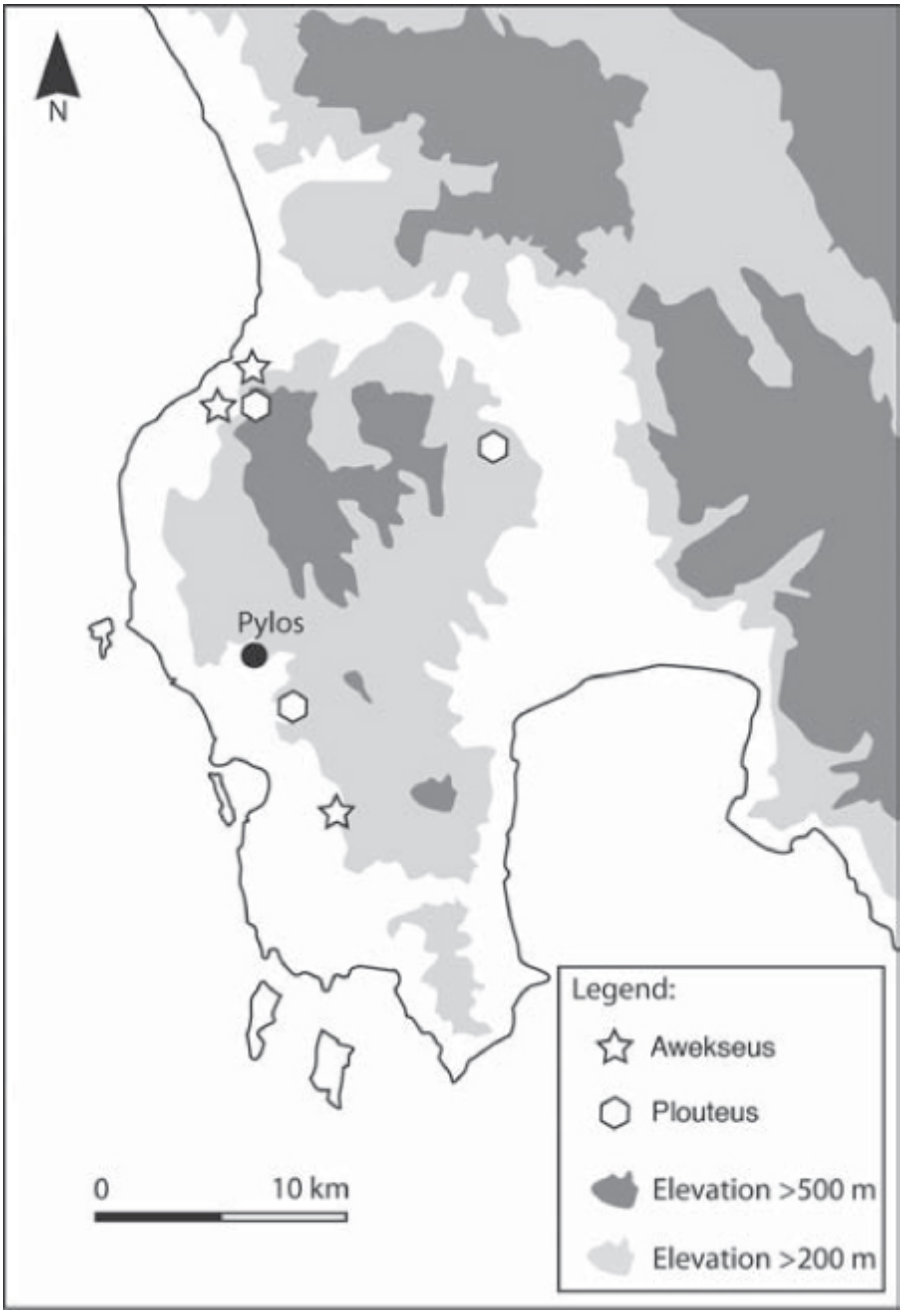


FIGURE 10.2. Elevation map of the Pylian polity, with the approximate locations of the activities of Awekseus and Plouteus.

The heterogeneity of the collectors discourages the idea that they constitute a coherent group with distinct duties. In fact, there are a number of other individuals who are not defined as collectors but who, like the collectors, appear in a number of textual contexts and

appear to be administrators of some importance. Rather than thinking of individuals as occupying positions in a fixedrank system occupied by official titles, the variety of responsibilities of named individuals suggests that we position these historical actors along a continuum of administrative practice. Generally speaking, the more texts in which an individual appears, the greater the variety of his or her responsibilities and the more important his or her tasks tend to be. This might seem obvious, but a bureaucratic model of Mycenaean administration should assume that specialization would be the rule. There are relatively few individuals with multiple administrative responsibilities; Table 10.1 shows the distribution of personal names based on the number of tablet series on which they appear.

The administrative order is therefore quite hierarchical, but it is not populated only by bureaucrats with fixed responsibilities; it also includes these multitasking officials identified by personal name in the Linear B tablets. At the top of the hierarchy are individuals such as Alksoitās; further down are individuals like Awekseus and Plouteus.

The heterogeneity of the activities of Mycenaean named individuals, many of whom were individuals of considerable standing in the polity, presents some problems to the traditional model in which the state is a static institution composed of an interlocking set of routines implemented by impersonal bureaucrats. Indeed, it is striking how much variation is present even in the activities of palatial officeholders for whom we have a significant dossier of documents (Shelmerdine 2008, 127–32). This is not to say that the function and status of particular offices are not important, but that there are limitations to an approach that sees the office as the chief unit of analysis, especially since there are a large number of named individuals who are not recorded as holding office yet are manifestly important agents of the state. If named individuals were not passive ciphers but the knowledgeable agents described by structuration, then why should they have blindly operationalized bureaucratic procedures? One possible answer might be that they had no choice, that they were constrained by the state. Those individuals who were involved in multiple activities under palatial purview were probably elites, however, because only such individuals would have had the wherewithal to manage more than one operation at the same time in more than one locale. High-status named individuals such as the "collectors" may have been closely associated with, or even members of, the royal household (Killen 1995, 213), whereas individuals such as Awekseus and Plouteus were probably regional elites whose communities were swallowed by the expansion of the Pylian state over the course of the fourteenth and thirteenth centuries BCE (on which, see Bennet 1995, 2007).[8] If these individuals were important

people in their own right, then it seems unlikely that they were passive dopes pressed into royal service. Indeed, the terms on which these individuals participated in the palatial economy gave them the opportunity to enhance their access to material advantages and social status. The palace could and did provide these, in the form of control over large amounts of material resources (e.g., bronze, animals, land) and official positions of authority. Consequently, we may legitimately view named individuals as knowledgeable actors whose participation in administrative affairs was based on their perceptions of their interests and expectations based on their access to resources, symbolic and material. These perceptions were socially mediated and indeed need not have been considered consciously or discursively (Bourdieu 1977, 72). Thus, the Mycenaean state was constituted not by bureaucratic rules but by the varied practices of historical actors.

TABLE 10.1. The distribution of personal names ranked by the number of tablet series on which they appear, using only certain and complete names.

Number of Tablet Series	*Number of Personal Names*
7	3
12	2
5	6
14	0
0.5	4
0.6	4
0.7	4
0.8	4

The personal wealth of these elites suggests that even if the palace dominated a particular socioeconomic field, the relationship that it had with that field was not necessarily one of simple “control” (de Fidio 2001; Knappett 2001). Indeed, the principal responsibilities of named individuals in the extant documentation at Pylos correspond with the traditional pursuits of Mycenaean elites prior to the establishment of the palaces, especially warfare, animal husbandry, landholding, and the acquisition and consumption of crafted goods (Wright 2004). In some cases, the palatial economic system assumes that these activities continued to be practiced outside of its purview. As mentioned above, herders were responsible for making up for accidental deaths in palatial flocks by supplying animals from their own herds; it is even possible that the palace depended on private breeding to maintain the numbers of its flocks.[9] Palatial sponsorship of bronze artifact production must have depended on the presence of production outside of palatial management, given the large number of part-time smiths attested in our documentation.[10] The operation of the

state was therefore deeply embedded in other traditional pursuits and even presupposes them.

This evidence strongly recommends the structurationist model of the state as a dynamic structure reproduced through practice, especially social interactions among the king, palatial elites, regional elites, dependent laborers, local communities, and institutions. That is, rather than simply being an institution *on which* individuals act, the state is one medium *through which* they act. The Linear B texts provide a large amount of direct evidence for a wide variety of practices overseen by palatial administrators. Interactions between individuals and groups manifestly make up the bulk of the material of the textual documentation: an individual is given an allotment of bronze (Jn series) or staples (Fn series), a palatial administrator receives goods from named producers (Pn 30), and so on. These individuals could not act just as they pleased, however, because they were constrained by administrative arrangements and hierarchies. The state also enabled certain practices: the wide geographical distribution of the activities of named individuals was certainly facilitated by the scale of the polity. The wide spread of elite activities, in turn, may have limited the potential for regional elites to consolidate power locally.

On the other hand, the Mycenaean state is more than just a single structure. Traditional structures that existed prior to the formation of the state were altered through the ongoing process of state formation. The fact that the palace increasingly monitored large numbers of animals, which were allocated to individuals who were responsible for tending them, keeping flocks at a fixed number, and providing wool to the palace, cannot have left the traditional practices of animal husbandry untouched. Such structural changes are to be understood not only as the result of strategic interventions by the palace to seize control of certain sectors but also as the results of internal processes produced by historical actors. Wright (2004, 99–100) has argued, for example, that the standardization in drinking services contemporary with the construction of the palaces on the Greek mainland was the result of "the emergence of standards of taste and a burgeoning demand for commodities which represented status and that could be used in displays of status" by "the newly enfranchised functionaries of the palace-centered system," whom I equate with the named individuals in the Linear B tablets from Pylos.

It is possible to argue, therefore, that to a large extent the Mycenaean state is not just an institution that controls certain socioeconomic fields and not others but also a network or tissue of structures that are interrelated in complex ways. To take just one example, the text Jn 829 records that regional officials from each of

the sixteen districts of the Pylian polity, in coordination with other religious and agricultural officials, will give "temple bronze" (presumably this refers to bronze stored in temples) to the palace to be made into javelin- and spear-points. Although it is possible that this text reflects an emergency requisition of metal, a number of the tablet's features suggest that the procedures involved in the collection of the bronze were established administrative practices (Killen 1996; Palaima 1995b, 625). A wide variety of agents were involved in these transactions: it was not as simple as the palace setting targets for the bronze levy and collecting the metal. Each district had a governor *(ko-re-te)* and a vice-governor *(po-ro-ko-re-te);* the former worked with the superintendents *(dumartes, du-ma-te),* the latter with the keybearers (*klāwiphoroi*, *ka-ra-wi-po-ro),* the fig-overseers *(opisukoi, o-pi-su-we),* and the digging-overseers *(opiskapheēms, o-pi-ka-pe-e-we)*. Palaima (2001, 159) suggests a scenario in which religious personnel were allocated landholdings and were required in turn to provide agricultural produce and scrap bronze. This seems plausible, and it is also worth noting that most lands monitored directly by the palatial administration were not under the direct control of the king but were controlled by local corporate bodies called *dāmoi* (Killen 1998). Thus, even the chief administrative interests of the state—taxation and landholding—were processes that involved multiple agents and groups and represented complex intersections of several social structures.

This model of the Mycenaean state suggests that it is both more and less than it is usually considered to be. It is less insofar as it is a virtual structure produced by interactions among historical actors with different interests and resources, rather than a freestanding agent in its own right that bends society to its will (Mitchell 1999), and in that it largely builds upon preexisting social practices rather than fundamentally reorganizing them (there is, for example, no radical urbanization associated with the formation of the Mycenaean state). Situated actors, however, often encounter the state as an institution that palpably constrains their activities; indeed, we should not downplay the demands that the palace made on members of Mycenaean society, from corvée labor to taxation (Killen 2006). The seeming contradiction of the state as a virtual structure that exerts significant constraints can be explained in two ways. First, the encounters between an individual and the state are actually mediated through individual interactions, which are often conflictual. In these cases, actors use the resources at their command to achieve desired ends, and state officials are often able to prevail in these encounters. Second, the state is not only a set of administrative routines but involves a reconfiguration of many traditional ways of doing things, from agriculture to religious practice. Consequently, constraint is

generated not just by the external power of the state backed by force but also, and perhaps more importantly, by the internal changes to the very structures that organize the practices that constitute the fabric of social life. This fact, namely that the formation of the state engenders changes in many (but not all) of the structures of everyday life, suggests that the Mycenaean state was also more than it is usually thought to be.

CONCLUSIONS

Structuration has a substantial contribution to make to the study of ancient states generally, and the Mycenaean state in particular. The approach advocated here has the advantage that it emphasizes the social aspects of both individuals and structures: individuals are socially constituted and therefore we cannot reduce agency to strategic intentionality, and structures are not freestanding entities but are only instantiated in practice. In the Mycenaean case, structuration provides the basis for a critique of the traditional model of the state as a static bureaucratic system; it also suggests that the state and other structures were historically produced and reproduced through interactions among all types of historical actors in a diversity of social contexts. Instead of an impersonal bureaucracy, the state is a dynamic social process. This model is not new, but it has not been applied in detail to particular archaic states. Instead, it tends to be used in broader comparative and synthetic studies (Smith 2003; Yoffee 2005). Sustained empirical engagement is important, however, because without it, approaches like structuration are easy to dismiss (Robb 2007, 3–4; Varien and Potter 2008).

Mycenaean Pylos provides for an instructive case study because the nature of the textual data allows us to investigate synchronically the actions of a large number of individuals within a specific set of contexts—namely, activities directly under palatial oversight. Furthermore, some inferences can be made regarding the mutual constitution of agency and structures with respect to the Mycenaean state. For example, the field of animal husbandry was constituted by the actions of hundreds of individuals who were in possession of personal flocks of sheep and were occasionally allocated palatial animals as well. Those men to whom palatial animals were allocated are recorded by personal name in the Linear B texts; many (if not all) were local elites whose families no doubt had invested for generations in animals. Named herders probably stood to gain materially through their involvement in wider palatial systems of animal husbandry, because they were able to expand their holdings in terms of both the

number of animals and the geographical distribution of their flocks. They were also constrained by the terms upon which palatial flocks were allocated, which from the perspective of palatial administrators represented a simple arrangement, because it did not require the authentication of each accidental death to prevent fraudulent reports. Named herders may have decided to engage in palatial animal husbandry as part of a strategy to enhance their economic and symbolic capital, although this strategy need not have been consciously chosen. The traditional value of animals in the storage, display, and manipulation of wealth, especially in the sponsorship of feasts, would have encouraged individuals to participate in palatial systems of animal husbandry. The consequence of these actions, perhaps unintended, was the reproduction of these herding practices and the palatial economic system as a whole.

It is an unfortunate limitation of the Mycenaean evidence that the Mycenaean individual is not much more than a name. As is so often the case, the data are heavily biased toward male aristocrats and their concerns. I argued above that the individuals about whom we have the most information—generally consisting of a name, title, and administrative responsibilities—are probably elites, broadly defined, and a vast majority of all named individuals are men. I have described these agents as typical Mediterranean elites, similar in many ways to Homeric chieftains and Bourdieu's agonistic Kabyles, who are always aiming to enhance their prestige through agonistic interactions. Although the textual evidence does not allow us to examine the social formation of these individuals as extensively as we might like, the study of named individuals within a structuration framework does allow us to appreciate their heterogeneity. This represents an advance on traditional bureaucratic approaches, which tend to regard individuals as members of homogeneous categories. Even if terms for these categories exist in Mycenaean Greek, they represent administrative labels and not necessarily distinct groupings or identities that individuals themselves embraced.

Structuration is designed in large part to deal with everyday and routine social practices; this is why it has proved useful in contexts as diverse as the Italian Neolithic (Robb 2007) and the Mycenaean state at Pylos, and why it has been so productive for archaeologists, who study the material remains of quotidian activities. Structuration's insistence that structures are historically constituted by practice allows us to unravel the complexity and variability of ancient social systems. By focusing on the structures that organize past behavior rather than agency as intentional choice, archaeologists can elucidate the processes that enable and condition agency in the first place.

NOTES

1. Proposals have been made for the personal names of the *wanax* (Nakassis 2012; Palaima 1995a, 129–35) and the *lāwāgetās* (Lindgren 1973, 2, 134–36, 186–87) at the site of Pylos, but these are not universally accepted.

2. This critique has been made by a number of scholars, for example, Ahearn (2001); Dobres and Robb (2005); and Joyce and Lopiparo (2005).

3. Wacquant (in Bourdieu and Wacquant 1992, 3n3) excludes Bourdieu from the adherents of structuration theory, and Bourdieu himself prefers "genetic structuralism" to describe his approach (Bourdieu 1990a, 14).

4. Although Bourdieu emphasizes that *habitus* is productive only in relation to particular "fields" (artistic, religious, economic) that have dynamic boundaries, specific logics, and complex relationships with each other, this only applies to modern, differentiated cultures (Bourdieu and Wacquant 1992, 94–137). Bourdieu does not use fields in his analysis of traditional societies, nor does he seem to approve of it (Swartz 1997, 135).

5. There are three texts that seem to be earlier in date (Palaima 1983, 1988, 111–13, 133, 162–69, 172); a fourth text (Xa 1449), thought to be exceptional, has since been shown to date to the final destruction (Melena 1998, 166).

6. Using non-fragmentary names, there are 707 names for a maximum of 865 individuals (1.22 individuals per name); although a number closer to 800 is more likely (1.11 individuals per name).

7. It has also been proposed that Alksoitās is the personal name of the main scribe at Pylos, Hand 1 (Bennet 2001; Kyriakidis 1998). Mycenaean scribes are anonymous but are identified on the basis of their writing styles and habits (for Pylos, see Palaima 1988).

8. The elite status of many named individuals is also suggested by other factors: many named individuals hold high office, participate in the "international" naming practices of the Mycenaean elite (Olivier 2001), and are involved in important exchanges with the palace, including international trade.

9. The minimum number of ewes represented in the preserved texts at Pylos (as a percentage of the adult sheep population) is 17 percent; this is significantly below the 25–29 percent required for annual restocking (Halstead 1993, 357).

10. There are approximately 270 named smiths at Pylos, but about

two thirds of these documents are preserved; allotments, which were probably annual, range from 1.5 to 12 kilograms, with an average of 3.5 kilograms.

Epilogue: Agency and Writing

Ruth D. Whitehouse

I take it as my brief in this epilogue to pick out issues that I find particularly interesting and to make some suggestions for future research. I make no apology therefore for concentrating on my own interests and also for introducing examples that come from my own research field, first-millennium BC Italy, which is not covered by any of the chapters in the volume.

I shall focus specifically on different ways in which agency relates to writing, both as a general theme and as treated in the chapters in this volume. I shall avoid a general discussion of agency and of the various approaches to its study in archaeology, although some aspects will be touched on in the course of my account. There are at least three different ways in which agency relates to writing, each of which can be further subdivided: agency can be revealed in written documents, agency can be involved in producing written documents, and, finally, there is the agency of writing itself.

AGENCY REVEALED IN WRITTEN DOCUMENTS

This refers to information about agency in society that is revealed through texts, as in the third section of this volume. Nakassis's chapter, which discusses the roles of named individuals in Mycenaean Greece, provides a particularly good example. This kind of study, which is fundamentally the same as that carried out by historians in better textually served eras, is of course valuable, because it allows us access to information about the lives and activities of individuals normally inaccessible to archaeologists. However, it is less *about* writing than are the other types of agency discussed here. The kind of information gained does not intrinsically depend on the written form but is of types that could in different circumstances be obtained from other sources: in the case of present-day societies, for instance, from oral information or observations of behavior. For this reason, I shall not discuss it further here; instead, I shall concentrate on the other two types of agency in which writing is central.

AGENCY INVOLVED IN PRODUCING WRITING

This type of agency is one of the major concerns of the current book, with some chapters devoted to agency in the emergence and development of early writing systems and others concerned with the production of specific inscribed artifacts or categories of artifacts.

Studies of agency of this type can usefully be subdivided into three: those concerned with the development of entire writing systems, those concerned with specific artifacts but concentrating on the origination of the writing content, and those concerned with the production of the inscribed artifact. All of these are valid and interesting, but they involve rather different types of research, albeit linked by the concept of "agency." Studies of the first type tend toward the abstract and concentrate on cognitive and linguistic issues, with materiality relegated to a subsidiary role or absent altogether. The chapter by Smith in this volume is a good example, referring to writing systems in general rather than any particular system (although Chinese is used as an example). The abstract concepts employed by Smith include "visual object recognition" and "repetitious intensification," discussed as general phenomena independent of any specific context, historical, archaeological, or material. As Englehardt and Nakassis argue in the Introduction, this can be regarded as agency in the structurationist sense, but I wonder whether this usage stretches the term too far. Does a term—"agent"—that can embrace named individuals at one end of the definitional spectrum and abstract nouns at the other really have any utility?

The other two categories both relate to specific inscribed artifacts, one to the content of the inscription, the other to the artifact itself. The agency involved may overlap or even be the same in some cases, but more often would be different. The societies that produced early writing were all hierarchically organized (characterized in traditional terms as high-level chiefdoms or states) and writing was the concern of either the elite proper (royalty/aristocracy) or the authorities responsible for running the state bureaucracy, who usually occupied respected if not top positions in the hierarchy. In terms of the writing, the bureaucrats, or some of them, were certainly practitioners, but the members of the elite proper may not have been. In terms of the inscribed artifact, it is unlikely that either the elites or the bureaucrats were responsible for the whole manufacturing process. Even in the case of clay tablets of Mesopotamia or Mycenaean Greece, which represent a "low-tech" writing material, it is unlikely that the "scribes" excavated their own clay or levigated it, although they may

have shaped the tablets. Equally, it is unlikely that Egyptian "scribes" prepared their own papyrus scrolls from scratch. In first-millennium BC Italy, and in many other areas too, much early writing is on pottery, bronze, or stone artifacts, all the products of specialist artisans; it is unlikely that elite persons carved stone monuments, chiseled bronze tablets, or painted or engraved pottery vessels. Thus, we probably have two separate strands of agency here, one involving the origination of the writing, and the other the production of the artifact. Several chapters in the volume focus on specific types of artifacts, but most concentrate on the way they were used, with less emphasis on how they were made. The exception here is the chapter by Johnson and Johnson, which focuses on a specific group of cuneiform tablets and describes in great detail the ways the texts were produced. However, even this chapter does not discuss the production of the blank clay tablets and no other chapters in the volume examine the production of the artifacts themselves.

THE AGENCY OF WRITING ITSELF

The third kind of relationship between agency and writing relates to the agency of writing itself, its power to cause things to happen and to change things, which could, as Englehardt and Nakassis discuss in the Introduction, be labeled "material agency" (see, e.g., Knappett and Malafouris 2008) or "secondary agency" in Gell's terms (Gell 1998). However, one aspect of this kind of agency of writing is *not* primarily material but instead represents an extension of the agency of the writer and is a traditionally considered aspect of writing: its ability to transcend the limitations of space and time that constrain oral communication. Thus, the power, intentions, and emotions of individuals can be spread across space in media as diverse as state decrees and personal letters, and time is overcome by the construction of monuments or the preservation of archives that record the lives and achievements of long-dead people. An evocative example is provided by the funerary monuments that lined the roads leading out of Roman cities, most notably those on the Via Appia at Rome. These "speaking inscriptions" addressed (and still address) passersby, asking them to read the inscription and often to greet the person commemorated (see, e.g., Carroll 2009).

However, writing can also itself have agency, independent of the agency of the specific writers. There are two ways (at least) in which this may work. One relates to the inability of the original writer to control the uses and understandings of his or her words or of the artifact or monument on which they are inscribed, beyond the context

of the particular time and place of their original production and use. Therefore, in different communities a document or monument may have quite different functions and meanings from those envisaged by the original writer, whose identity may have been forgotten or relegated to the realm of semi-mythological ancestry. Indeed, the language itself may not be understood in a different place and time. This would be true, for instance, of the Egyptian obelisks transported to Italy by the Romans and set up in public places there. In these cases, it is the writing or the inscribed artifact in its new context, not the intentions of the original writer, that inspires people to feel particular emotions or perform particular activities.

The other way writing may have agency relates to emic beliefs in the inherent efficacy of writing to do things. We know from ethnographic and historical sources that in some societies writing was believed to have inherent powers that we may describe as magic or supernatural. There are also various types of archaeological evidence that may support this kind of interpretation. One of these involves making the practice of writing a sacred activity. I know of an example in first-millennium BC Italy that, so far, I have been unable to find any close parallels for elsewhere. In the northeast Italian center of Este, where the local ancient language is known as Venetic, there was a sanctuary in the Baratella area, used from the sixth to the first century BC, dedicated to a goddess named Reitia, whose chief function seems to have been as a deity of writing (Prosdocimi 1990; Whitehouse and Wilkins 2006). The main votive offerings at the sanctuary consist of bronze versions of equipment used for writing, of which the originals presumably were made of wood and wax: specifically writing tablets and styluses. The bronze writing tablets carry both a tabulated version of the Venetic writing system—with vowels, consonants, and consonant combinations—and a dedicatory inscription to Reitia. The bronze styluses also sometimes bear inscriptions dedicating the artifact to Reitia, although most contain only lines of repeated letters. The bronze artifacts, especially the tablets, are elaborate objects involving valuable raw material and specialist expertise and time in their production; their dedication in a sanctuary and to a deity apparently mostly concerned with writing strongly suggests that writing was a sacred activity involving supernatural attributes.

Another class of evidence supporting the idea of writing being considered powerful in its own right is the occurrence of pseudoglyphs. These occur in a number of writing systems, including the Maya (see Carrasco, this volume) and among the Veneti, where the bronze styluses discussed above may bear actual inscriptions, lines of repeated letters, or repeated decorative motifs, which may reasonably be described as pseudo-glyphs. Another example is

provided by the "nonsense inscriptions" found on some sixth-century BC Attic pottery drinking vessels exported to Etruria (Immerwahr 2007). The existence of signs that mimic letter forms but have no semantic value supports the idea that writing was considered valuable and powerful in its own right.

A belief in the inherent power of writing can sometimes be deduced from a combination of the content of inscriptions and their archaeological context. One example is provided by Roman curse tablets, thin sheets of lead inscribed and then rolled or folded several times and often pierced with a nail (Gager 1992; Wisniewski 2009). They were deposited in private houses but also in public places such as arenas, bathhouses, and cemeteries. The texts consist of spells designed to bring harm to specific named individuals and were addressed either explicitly or implicitly to gods, particularly deities of the underworld. It is clear that the power of these curses lay in the writing itself, perhaps also combined with the performance of rituals associated with their deposition. That the Romans really believed in the power of such curses is clear: using magic for assassination was a capital offense in ancient Rome. In this case, unlike those discussed in the previous paragraphs, it was not writing in general that was powerful. Clearly, it was the specific inscription that held power, including preeminently the name of the individual being cursed and also the form of the spell employed. Equally clearly, however, it did not work through what we might regard as the normal process of the intended recipient reading a message, because the rolled or folded pieces of lead were not intended to be read by living human beings.

Other "hidden" writing may also have worked in similar ways. This applies to much writing inside tombs, found in many different cultures, such as that described in Bestock's chapter. In most of these cases, the writing could only have been read by living humans for the brief period of the funeral ceremony, if that. If it was intended instead for the "eyes" of dead people or gods, it could only have worked through supernatural means.

FUTURE RESEARCH DIRECTIONS

Given the early stage of the application of agency studies to writing, there are many directions in which future research could profitably go. Here, I shall concentrate on just two that interest me particularly and that I feel are underrepresented in the present volume.

The first relates to the *materiality* of writing, a subject that I have been focusing on for the last few years (Whitehouse, n.d.). A conference held in 2009 at the University of College London's Institute

of Archaeology on this subject and now being prepared for publication (Piquette and Whitehouse, forthcoming) sought to explore past "writing" and related symbolic modes in relation to material practice, performance, and sensory experience. Although all of these aspects make an appearance in this volume, there is certainly scope for further work. As I have already mentioned, no chapters in this volume address the agency involved in the production of the artifact "blanks" on which texts are inscribed, and this omission is characteristic of studies of writing in general. I think this neglect probably relates to the deep-seated dominance of linguistic traditions in text studies that archaeologists have not yet fully overcome. For instance, we continue often to use the term "supports" for the artifacts on which writing is found, as if these objects served no other purpose than to carry inscriptions—a manifestly absurd proposition that implies that, for instance, clay, papyrus, bronze, stone, bone, and pottery artifacts provided equivalent and interchangeable surfaces to write on. The reality is that the whole *chaîne operatoire,* from raw material to finished, inscribed artifact, is necessary for the creation of the object that archaeologists deal with and we should not artificially detach the later stages of this process for separate study. Detailed studies of the artifact's manufacture could inform understanding of the agency involved in producing the written document. For instance, such studies might cast light on the total production time and the full range of people involved, possibly including groups of different ages, genders, and classes, from the "scribes" who did the writing and the elites who commissioned it. Obviously, archaeologists are qualified to undertake this work, drawing on a long tradition of artifact study that is usually kept separate from textual studies.

Another subject area I feel deserves greater attention is *literacy*. Archaeologists often use the term as a general label to indicate societies that practiced writing, whereas in the more linguistically oriented studies devoted to the subject there is a strong emphasis on "reading" and "writing," understood much in present-day terms (see Collins and Blot 2003 for an overview of literacy studies). An agency-oriented approach to the subject in archaeology would certainly reveal a much greater range of practitioners than can be encompassed in the terms "writers" and "readers." On the production side, I have already suggested that we should consider the people who made the artifacts as well as the people who wrote on them, and in some cases the (different) people who commissioned them. We might also look at the less formal or accomplished texts found in many societies, such as graffiti, and consider the competences and roles of those who produced them. On the consumption side, we might identify fully literate (in the modern sense) readers, who could understand texts

completely, whether as the recipients of personal letters or as the viewers of inscribed public monuments. We might also consider those who could perhaps read a little but could not decipher a text in detail. Then there are those who could not read at all but who "consumed" writing through oral performance by others or through participatory performance and sensory experience. We should also consider the agency of supernatural beings—deities, ancestors, and dead people in general—who were certainly believed to be both readers and writers in many societies. In this context, we should remind ourselves that all the main monotheistic religions of the world believe that God has written a book—a book that is expected to have a profound effect on people's feelings and behavior. Chapters in this volume address various aspects of the agency involved in literacy in the broad sense but do not address it as a theme in itself.

This volume opens up a new avenue to the study of early writing, one with abundant potential, adopting a range of approaches already well developed in other areas of archaeology. I suggest here that a focus on materiality on the one hand and literacy on the other—studied specifically in agency terms—would be two productive directions to pursue.

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Index

Page numbers in italics indicate illustrations.

Abu Salabikh, 166; cuneiform script from, 169–79
Abydos: mortuary contexts, 98, 106–7, 109–10, *110;* tomb U-j, 99–106
administrative systems: Mesopotamia, 12, 56–59; Mycenaean Greece, 237–38, 242–44, 250
aesthetic profile, 167; of UD.GAL. NUN, 168–71
afterlife, 13; Egyptian writing and, 95–96
agency theory, 8–9, 232–34
agriculture: in Mesopotamia, 50; in Zhongshan, 221, *223*
Ahkal Mo' Naab, 157
Akkadian, 47, 65
Alksoitās, 241, 247(n7)
almanacs, Aztec, 27–29, *29*
analogy, innovation by, 88
Andes, khipu use in, 29–31
animal husbandry, 221; Mycenaean Greece, 239, 241, 245–46, 247(n9)
Anordnung, 168, 180–81(n3)
Anyang, divination records from, 86–87
Appadurai, Arjun, *The Social Life of Things,* 135–36
archaeology: agency in, 2–5, 9–10, 232–34; of economy, 219–24; individual in, 209–10; text-aided, 15, 218, 226–27
architecture: Maya inscriptions in, 149–50; Teotihuacán-style, 191–92
Arslantepe, 56, 59
art: Egyptian representational, 98–99; Maya, 140–41, 163(n3)

Art and Agency (Gell), 4–5
artifacts, 189; inscribed, 250–51, 254; promiscuous/inalienable, 128–29; Teotihuacán-style, 191–92, 207(n4); texts as, 7, 14–15
atlatl, as central Mexican motif, 191, 196
Attica, drinking vessels, 252–53
Awekseus, 239, 240, 241, 242
Aztecs, divinatory books, 27–29, *29*
Babylonia, writing in, 45
ballcourt markers, 196–97
balls: Uruk clay, 60–62, 66, 68(nn19, 20)
books: divinatory, 27–29, *29*; Maya, 144–47, 147; Mesoamerican, 141–43; Mixtec, 31–33
Bourdieu, Pierre, on *habitus,* 235, 247(n4)
boustrophedon mirror flip, 91
brain, visual memory center in, 78–79, 181(n6)
bronze: plaques, 80–83; tablets, 252; vessels, 16, 213–16, 218, 228–30
Bronze Age, 17, 115; Parading Lions motif, 126–33, 136; seals, 13–14, 116–26, 137(n4)
bureaucracy: Mesopotamian, 55–59; Mycenaean, 243–44; state, 250–51; Zhongshan, 215–16, 217
bureaucratic records, Mesopotamia, 47, 53–54
burials, 36, 147; Western Han, 80–83; Zhongzhan, 222–23
Calakmul, 205
cemeteries, Egyptian, 99, 108–9 ceramics, 74; Egyptian mortuary, 104–5, *105*; inscriptions on, 252–53; Maya books depicted on, 144–47, *147*; with Maya pseudo-glyphs, 147–50; Maya speech depictions on, 151, *153,* 153–56; Moche, *38,* 39–41
Cheng, King, 218, 219
Chi Jo Nik, 199
China, 46, 74; divination records, 86–87, *91;* pictography in, 80–83, 90; sign form replication, 83–85; Warring States period, 16, 210–13, 218–19; writing in, 16, 13, 46, 88–89
Choga Mish, 53, 54, 62, *64*; clay balls, 61, *63*, 68(n19)
Ci, King, 213
Classic period (Maya), 186, 203, 206
clay: balls, 60–62, 66, 68(nn19, 20); seals, 50–52, 54, 56–59; slabs, 62–63; tablets, 7, 47, 68–69(nn21, 22), *233*, 235–36, 251
Codex Borgia, 27–28, *28*
Codex Fejérváry-Mayer, 28, *29*

Codex Nuttall, 31
Codex Selden, 31, *32*
codices: Aztec, 27–29, *29;* Maya, *141*, 141–43, *143*, 144–*47*; Mixtec, 31–33
coinage, Warring States period, 224, 225, *226*
commodities, record keeping, 59–60
communities, and Minoan Crete seals, 119–20
competence, literacy, 79–80, 84–85
componential structure, emergence of, 92–93
containers, Mesopotamian clay seals, 51–53, 56–57
context, of Maya inscriptions, 143–44
Copán, rulership, 203–5
corporate bodies, Mycenaean, 244
cosmograms, Aztec, 28, *29*
cosmology, Maya, 201–2
costuming, Moche, 36–39
counters, Uruk period, 59–61, *61*
craft production, Western Han, 85
Crete, 13–14, 130; Bronze Age seals, 116–17, 118–26, 137(n4); Minoan iconography on, 115–16; Parading Lions motif, 117–18, 126–33, 136
cuneiform, 15, 47, 90, 181(n5); aesthetic profile of, 166, 168–71; scribal habitus of, 171–79
Cuo, King, 219, 224, 227; bronze vessel inscription of, 213–15, 228–30
curse tablets, 253
cylinder seals, 54, *55,* 61; Egyptian mortuary, 105–6, *107*
dance notation systems, 24–25
Degirmentepe, 53
Déjerine, Jules, visual memory center, 78–79
Delos, 151
dialogue/discourse: first- and second-person, *151,* 151–56; third-person, 156–60
divination records, Chinese, 86–87, *91*
divinatory books, Aztec, 27–29, *29*
Djet, 109
Domain of Images, The (Elkins), 25
door sealings, 55, 57, 58–59
drinking services, Mycenaean Greece, 243–44

dynasties, Maya, 189–200, 207(nn6, 7)
Early Classic period (Maya), 186
Early Minoan-Middle Minoan transition (EM-MM), 115–16; Parading Lions motif, *123,* 123–25, *125,* 126–33, 136; seal use, 118–23, 137(n4)
economic systems: Mesopotamia, 12; Mycenaean, 239; Zhongshan, 220–24
Egypt, 90; afterlife in, 95–96; grave robbing, 223–24; mortuary inscriptions, 13, 99–110; selfhood and identity, 6–7; writing systems, 13, 45, 46, 66(n1), 96–99, 251
elites, 16, 65; in Egyptian cemeteries, 106–9; Maya, 147, 154–56, 186, 207(nn6, 7); Mycenaean, 238–39, 242–44, 247(n8); Tikal, 199–200
Elkins, James, *The Domain of Images,* 25
El Perú-Waka', 201
Enki, in UD.GAL.NUN texts, *170,* 170–72, 173, 181(n7), 182(n10)
Enlil, in UD.GAL.NUN texts, 168, *169*
environment: northern Mesopotamia, 49–50; societal development and, 47–48; southern Mesopotamia, 48–49; and writing, 65–66
epigraphy, 6, 7; context of, 143–44
exotics, Parading Lions seals as, 126–31
factories, Zhongshan, 220–21
families, use of clay seals, 51, 58, 67(n8)
Fara, 175
First Dynasty (Egypt): mortuary contexts, 96, 98, 99–110
foundries: bronze and iron, 220–22; Zhongshan, 220–22, 224, *225*, *226*
funerary contexts, Moche, 36, 39
Gelb, Ignace J., *A Study of Writing,* 45
Gell, Alfred, 163(n2); *Art and Agency,* 4–5
genres, of Maya inscriptions, 143–44
geopolitics, and environment, 65–66
Giddens, Anthony, structuration, 72–73, 75, 234, 237
glosses, in UD.GAL.NUN texts, 174–78
Gosden, Christopher, on promiscuous artifacts, 128
graphic systems, 24–25
grave goods, Zongshan tombs, 219
grave robbing: in Egypt, 223–24; Zhongshan, 222–23
Greece, 7, 151; Mycenaean, 46, 231, 236–45

Greek, 8, 231
Grube, Nikolai, on quotative discourse, 150–51
Gu, chancellor, and King Cuo's vessel, 213–15, 228–30
habitus, 235, 247(n4)
Habuba Kabira, 61, 62
Halaf period, clay seals, 51–53, 67(n8)
Hamoukar, clay seals, *52*, 57–59
Hebei, 212
Helms, Mary, 129
hieratic, Egyptian, 90
hieroglyphics, 25, 139; Egyptian, 90, 95–96, 99
hippopotamus ivory, Parading Lions seals from, 126, 127, 129, 130
historicism, 187
history, histories, 6; Maya writing, 15–16; Mixtec dynastic, 31–33; of Teotihuacán entrada, 189–93; Zhongshan state, 211–12, 218
Hombre de Tikal sculpture, 198, 202
Houston, Stephen D., 140
Huaca de la Luna, 35, *36, 37*
Huan, Duke, 211, 218
human agents: and khipu use, 30–31; and road use, 35
Hunal Tomb, 204
hydraulic civilizations, 49
iconography, 23; on Minoan seals, 116, 118–26; Moche ceramics, *38,* 39–41; negotiated social values and, 187–88; Parading Lions, 126–31; Teotihuacán/Mexican, 191–95, 196–99, 201; Tikal rulers, 202–3
ideas: objects as, 188; signs as, 23
identity, 137(nn5, 6, 7), 186, 207(n8), 219; Bronze Age Crete, 117, 131–33, 136; Egyptian ideas of, 6–7; negotiating social, 187–88; socially constructed, 202–3; Teotihuacán, 193–96
ideographic languages, 24
Inca, khipu system, 29–31
indexes, 23
indexical markers, Moche ritual accouterments, 36–39
individual(s), 13, 31; in archaeology, 209–10; concept of, 6–7; Mesopotamian seal use, 51, 58, 67(n8); Minoan Crete seal use, 118–26, 136, 137(n4); in Mycenaean Greece, 236–37, 238–39, 241–42, 244–45, 247(n8), 250; in Tikal, 189, 191, 192, 193–94; in Zhongshan, 213–16, 222–23

individualism, 187; Mesopotamian seals, 51, 58; in texts, 6–7
information, in khipus, 30–31
Ingold, Tim, on written text, 132
innovation, by analogy, 88
inscriptions, 6, 8; context of, 143–44
institutions, Mesopotamian seals, 58
intentionality, 234
Italy, bronze writing tablets, 252
Itzamnaaj, *153*
ivory, Minoan Crete seals on, 126
jars, Egyptian mortuary, 104–6
jar sealings, Mesopotamian, 57
jar stoppers: Egyptian mortuary, 105–6, *107;* from Knossos, *134*
Jasaw Chan K'awiil, 205
K'ahk' Tiliw Chan Chaak, first-person discourse of, 154–*55*
K'anal Witz, 155
K'an Chitam, 200, 207(n6)
Kemp, Barry, 209, 228(n7)
khipu, as semasiographic systems, 29–31
kings: Egyptian, 107–10; Maya, 192, 201–2; Mycenaean Greece, 238
K'inich Ahkal Mo' Naab, 160
K'inich Janaab Pakal, 157, 160
K'inich K'uk' Bahlam, 157, 160
K'inich Yax K'uk' Mo', 203–4, *20–4*
kula rings, 131
Landa, Diego de, 141, 149
Late Bronze Age, 232; clay tablets, 7, *233;* Linear B, 235–36
Late Chalcolithic period, 50, 56, 66
Late Postclassic period, Mixtec manuscripts, 33
Latour, Bruno, on network theory, 166, 167
leadership, political, 234–35
Lechuza y armas motif, 196
Linear B script, 17, 231, 235, 243; individuals and groups in, 236–37; Mycenaean administration and, 244, 245
Lingshou, 211, 228(n8); archaeology of, *212,* 212–13, *222, 223*; foundries, 224, *225*
lions, on Minoan Crete seals, 126–31
literacy, 72, 140, 254–55; competence in, 79–80, 84–85

Lord of Sipan, 36
Mann, Nancy, 131
mapping, consistency of, 83
Margarita Tomb, 204
markets, Lingshou, 224
material agency, 4–5
material artifacts, 7, 219; inscribed, 250–51; and social identity, 131–33; symbolism of, 129–31; Teotihuacán-style, 191–93; Tikal-Teotihuacán symbolic complex, 200–203
material goods: and negotiated social values, 187–89; symbolism of, 194, 196–97
materialism, new, 166–68
materiality, 14, 180(nn1, 2); writing and, 253–54
mathematical systems, 24, 25, 26; in Mesoamerican manuscripts, *27,* 27–29, *29*
Matwil Ajaw, 157
Maya, 6, 14, 90, 139, 207(nn6, 7, 9, 10), 227(n5); architectural inscriptions, 149–50; depictions of speech, 150–60; performance of texts, 141–43, 160–62; pseudo-glyphs, 147–49, *149*, 252; ritual use of books, 144–47, *147;* social agency, 15–16; and Teotihuacán, 185–86, 189–200, 203–6; visual and verbal art, 140–41; writing genres, 143–44
Melanesia, social identity in, 131
Memphis, mortuary inscriptions, 108–10
Mesoamerican manuscripts, as operational semasiographies, 27–28
Mesoamerican script traditions, 33, 46
Mesopotamia, 67(n6), 251; bureaucratic agency in, 55–59; clay sealings, 50–52, 67(n8), 68(n13); environment in, 48–50; record keeping, 59–60, 62–64, 68(n15), 86; social hierarchy, 68(n13); urban bureaucracy, 53–54; writing in, 11–12, 45, 46–47, 64–65, 66
messages, visual, 11
Minoans, 115; Parading Lions motif, 131–33; seal use, 118–26, 137(n4)
Mixtec: books, 141; dynastic histories, 31–33
Moche, 11, 42; compound semasiographies, 39–41; performance-based semasiographies, 35–39
monuments, 6; Maya speech on, 157–60; to Maya rulers, 194–96, 197–99, 201, 203, 227(n5)
mortuary contexts, 196, 253; Chinese, 80–83, 212, 213, *219, 220,*

222–23, 224–25; Egyptian, 13, 96–110; Moche, 36, 39
motifs, on Minoan Crete seals, 116–26
mural cycles, Huaca de la Luna, *36*
Mycenaeans, 46, 232; animal husbandry, 245–46; clay tablets, 7, 251; individual, 236–37, 241–42, 244–45, 250; Linear B script, 17, 231; non-palatial elites in, 238–39; palace-centered administration, 237–28, 243–44
naming, 76
Naqada IIIa, 97–98
Naranjo, Regal Rabbit Vase from, 154–55
Neolithic period, clay sealings, 50, 58
network theory, 166
new materialism, and scribal agency, 166–68
Nixon, Richard, hidden transcripts, 216–17
nonphonetic graphic systems, 25–26
notational seals, Cretan, 13–14
notational systems, 10, 25, 166
numbers: Maya, 145; Mesopotamian records of, 62–64
numeric systems, Mesopotamian, 63–64
Oaxaca, *res gestae* manuscripts, 31–33
objects, 163(n2), 166, 188, 203; books as ritual, 144–47, *147*; of foreign materials, 129–31; promiscuous/inalienable, 128–29; and social identity, 117–18; social life of, 135–36; speaking, 150–56; visual recognition and naming, 76, 77
offerings: Egyptian hieroglyphics and, 96; Maya codices and, *142,* 145, *147*
official seals, Mesopotamia, 57–58
Old Babylonian period, 90
Old Kingdom, mortuary offerings, 96
oral tradition, 140, 254; Maya performance, 160, 161–62
Owen, Charles, on graphic systems, 24
paintings, Maya ceramic, 144–47, *147*
palaces: as administrative centers, 232, 237–38, 242–44
Palenque, speaking images in, 157–60
Panel of the 96 Glyphs, 157, 160, *161*
Parading Lions motif, 136, 137(nn8–9); on Minoan seals, 116, 117–18, *123–24, 125, 134;* as promiscuous objects, 126–31; social identity and, 131–33
pastoralists, northern Mesopotamia, 50

patrons, of Maya visual art, 157
Peirce, Charles Sanders, 23
performance, 36, 139–40, 163(n1), 254; of Maya visual and verbal art, 140–43, 160–62
personhood, emic categories of, 6–7
Peru, Moche visual culture in, 35–39
pictographies, 24, 78, 90, 93(n1); Shizhaishan plaque, 80–81
Plouteus, 239, 240, 241, 242
poetry, Maya use of, 148–49, 156
political systems: leadership, 234–35; Maya, 15–16; Moche, 35–36
Popol Vuh, 156
power: symbolic, 187; writing as, 252–53
power relationships: in Maya writing, 15
Priestess of San Jose de Moro, 36
Priest in the Coca-Taking Ceremony, 36, *37*
priests, and Maya codices, 141–42
Primary Standard Sequence (PSS), on Maya vessels, 147–*49*
proto-tablets, 62–63
pseudo-glyphs, Maya, 147–*49*, 252
PSS. *See* Primary Standard Sequence Pylos,
232, *240,* 246, 247(nn9, 10); documents from, *233,* 239; elites and administration of, 242–44; Linear B script, 17, 237
pyramids: Moche, 35–36; Zhongshan, *221,* 228(n8)
pyro-osteomancy, 87
quantitative records, Mesopotamia, 47
quotative discourse, Maya, 150–51
readers: of *res gestae* manuscripts, 32–33; supernatural beings as, 254–55
reading order, standardization of, 90–92, 181(n5)
record keeping, 12; in Chinese divination, 86–87; Maya, 189, *190*; Mesopotamian, 59–60, 61–64, 68(n15), 86; in Zhongshan, 220–21
Regal Rabbit Vase, 154–56
religion, and writing, 254–55
res gestae manuscripts, as narrative semasiography, 31–33
“Revolt of the Objects” depictions, *40,* 40–41 ritual: Chinese records of, 86–87; Maya, 141, 144–47, 147; Moche, 35–39; Moche ceramics, 39–41; writing as, 252–53
road signs, as performance-based semasiographies, 33–35

robbery, Zhongshan, 222–23, 224
rock-cut inscriptions, Egyptian, 96–98
Rome, curse tablets, 253
royalty, Akkadian, 65
rulership: Copán, 203–5; Maya records of, 154–55, *155*, 157–60; socially constructed identities and, 202–3; Tikal, 189–200, 201–2
San Jose de Moro burials, 36
Saqqara, mortuary inscriptions, 108–9
Saussure, Ferdinand de, 23
scribal agency: and new materialism, 166–68; urban revolution and, 53–54
scribal habitus, 166; UD.GAL.NUN, 171–79
scribal schools, Abu Salabikh, 166
scribes: Egyptian, 251; Maya, 144–45, *147*; Mycenaean, 247(n7)
scripts, linear reading order of, 90–92, 181(n5)
sculpture, 151, 207(n10)
sealing, activity of, 133–35
sealings: Cretan Bronze Age, 14, 133–35; Mesopotamian clay, 50–52
seals, 137(n5): Bronze Age Crete, 116–17, 118–26, 137(n4); Mesopotamian clay, 50–61, 62, 67(n8); Parading Lions, 117–18, 126–33, *134*, 137–38(n9)
Seibal Hieroglyphic Stairway, Tablet 9, 151
selection: evolutionary consequences of, 90–93; synchronic variation in, 89–90
selectionist evolutionary processes, 87–88
selfhood, Egyptian ideas of, 6–7
self-referentiality, 160
semasiographic systems, 22–23, 42–43; compound, 39–41; narrative, 31–33; operational, 25–31; performance-based, 33–39
semasiography, 11, 21–23
sequencing, in UD.GAL.NUN texts, 172–74, 181(nn7, 8, 9)
Shang dynasty, 74; divination records, 86–87
Shizhaishan: bronze plaques in, 80–83, 92; sign forms, 80–85
sign(s), 23, 24, 77; Egyptian tomb, 101–6; pictographic, 78, 93(n1); performance-based semasiographies and, 33–35; precursor, 75–76
sign forms, 78; mirror-image reversal, 91–92; replication of, 83–85; on Shizhaishan plaques, 80–83
sign use, collaborative, 85

singers, of *res gestae* manuscripts, 32–33
Sipan, 36
Siyaj Chan K'awiil, 189, 191, 193, 199, 200, 205, 206, 207(n6); Teotihuacán iconography, 198, 201
Siyaj K'ahk', 189, 193, 196, 201
social actors, 187
social agents, in Maya inscriptions, 15–16
social change, 234
social events, *res gestae* manuscripts used in, 32–33
Social Life of Things, The (Appadurai), 136
social reality, 186
social values: material goods and, 188–89; negotiated, 187–88
societal development, environment and, 47–48
sociopolitical organization, 74, 188; lowland Maya, 199–200; Mycenaean, 232, 242
somatic attention, 135
Spearthrower Owl, 196, 198, 199, 207(n3)
speech: depictions of, 150–56; King Cuo's, 213–15; writing as representation of, 23–24
stamp seals, 54
stelae: Egyptian, 109–10, *110*; Maya, 194–96, *196, 197,* 197–99
Stela 31 (Tikal), 189, *190,* 191, *192,* 199, 201, 227(n3)
stone seals, Minoan Crete, *119*
storehouses, Mesopotamian, 52, 56–59, 67(n9)
Stroop effect, 77
Stuart, David, 140
structuration, 72–73, 234–35, 237, 245
Study of Writing, A (Gelb), 45
Sumerian, 47
supernatural beings, as readers and writers, 254–55
Susa, 53; clay balls, 61, 62, 68(n19); clay sealings, 54, 55
Susiana, 53, 67(n11)
symbolic power, 187
symbolism, 23; on Minoan Crete seals, 116–23, 137(n4); of Parading Lions motif, *123,* 123–24, *124, 125,* 126–31, 136; Teotihuacán, 193–94, 194–96, 203–6; Tikal rulership, 189–200
syncretism, Maya political structure, 15–16
synchronic variation, in Chinese writing, 88–90
tablets, 7, 47, 68–69(nn21, 22), *233*, 235–36, 251; bronze, 252, 253

Tablets of the Orator and Scribe, speech represented on, 157–60
tags, Egyptian mortuary, 101–4, 106
talud-tablero architecture, 191, 196–97
Taube, Karl A., 140
taxation, Zhongshan, 221
Teotihuacán, 207(n4); and Maya lowlands entrada, 185–86, 189–93, *195,* 195–200; rulers from, 193–94, 227(n3); symbolic complex, 200–206
text-artifacts, 7, 14–15, 165–66; aesthetic profile, 167–68
texts: and archaeology, 209–10, 226–27; individual reflected in, 6–7; Maya, 14, 141–42, 160; negotiated social values, 187–88
Tikal, 151, 227(n3); history, 205–6; speaking objects, *153*; Teotihuacan symbolism at, 186, 189–94, *195, 196,* 196–97, 200–203
tokens, Mesopotamian use of, *60,* 60–61, *61*, 62
Tok Chak Ich'aak, 191, 198, 201, 202
tombs, 13, 204; Egyptian, 98, 99–108, 223–24; at Lingshou, 212, 213; mastaba, 108–10; Shizhaishan plaque, 80–83; Zhongshan, *219, 220*, 222–23, 224–25
transcription: public vs. hidden, 216–17; in UD.GAL.NUN texts, 174–78, 182(nn11, 12)
translation, King Cuo's speech, 213–16
Uaxactún, Teotihuacán connections, 191, *194*, 196, *197,* 201
'Ubaid period, 53, 59, 67(n6)
UD.GAL.NUN texts, 15, 166, 181(nn4, 6), 182(n10); aesthetic profile of, 168–71; clustering in, 171–72; sequencing, 172–74, 181(nn7, 8, 9); transcription and glossing in, 174–79, 182(nn11, 12)
Une B'alam, Lady, 198–99
urban development, Mesopotamia, 49
urbanism: bureaucracy, 53–54; Mesopotamia, 49, 50, 53–54, 66
urban revolution, and scribal agency, 53–54
Ur III period, cuneiform reading order, 90
Uruk, 53, 68(n13), 86; clay balls, 62, 66, 68(n19); clay sealings, 54, 55, 59, 67(n11)
Uruk period, 53, 68–69(n22); clay balls, 60–62, 66; clay counters, 59–61, *61*; record keeping, 63, 65
Vase of the 88 Glyphs, 155–56
Venetic, 252
vessels: Egyptian mortuary, 104–5, *105*; inscriptions on, 252–53; King Cuo's, 213–15, 228–30; Maya codex-style, *142*; with Maya

pseudo-glyphs, 147–49, *149*; Maya ritual depicted on, 144–47, *147*; Maya speech depictions, 151, *153*, 153–*54*; Moche ritual, *38*, 39–41
visual codes, 21
visual culture, in Peru, 35–39
visual memory center, 78–79
visual perception, 76–77
visual representation, phonetic vs. nonphonetic, 11
visual word form area (VWFA), 79–80, 83, 181(n6)
voyaging conqueror, in Mesoamerican cultures, 201
VWFA. *See* visual word form area
Wak Chan K'awiil, 200
Warring States period, 217; bronze vessel inscriptions, 16, 213–16, 218; grave robbing in, 222–23, 224; in Zhongshan, 210–13
War Serpent, 193, 203
Watergate, hidden transcripts of, 216–17
Waterlily Jaguar, 198–99
Wei, 211
Weiner, Annette, on inalienable objects, 128–29
Western Han period, pictography, 80–83
Wittfogel, Karl, 49
words, 76; and visual memory center, 78–79
writers: control of, 252; supernatural beings as, 254–55
writing, 10, 132; as agency, 251–53; agency in, 2, 5–9, 249–50; development, 12–13, 45–46, 66(n1); as depiction of speech, 150–56; environment and, 65–66; genealogy of, 71–72; intelligently designed, 64–65; and materiality, 253–54; Mesopotamian, 11–12, 63–65; origins of, 73–74; as performance, 140–42; as representation of speech, 23–24; as ritual, 252–53; state bureaucracy and, 250–51; structuration, 72–73
Wu, Duke, 211
Yan, 220
Yax Ehb' Xook, 198
Yax Nuun Ayiin, 191, 192, 202, 205, 206, 207(n3); monuments to, 197–98; rulership of, 199–200, 201; Teotihuacán identification, 193–94, *195*, *196*
Yax Nuun Ayiin II, 205
Yucatan, Maya pseudo-glyphs from, 148
Zhongshan kingdom, 16, 227(n5), 228(n8); as community, 218–19; economy of, 220–24; foundries, *225*, 226; individual in, 213–16;

Warring States period in, 210–13